371.5 Se1c
Sears, Jesse Brundage,
Classroom organizat><nd control
DODGE CITY COMM COLL LIBRARY
3 8888 99027398 3

JUNIOR COLLEGE LIBRARY
DODGE CITY, KANSAS.

CAREFUL USE OF BOOKS IS

Date Due

OCT 2 4 2014	

371.5
S439
1928

RIVERSIDE TEXTBOOKS
IN EDUCATION

EDITED BY ELLWOOD P. CUBBERLEY

DEAN EMERITUS, SCHOOL OF EDUCATION
LELAND STANFORD JUNIOR UNIVERSITY

CLASSROOM ORGANIZATION AND CONTROL

Revised and Enlarged Edition

BY

JESSE B. SEARS

PROFESSOR OF EDUCATION

LELAND STANFORD JUNIOR UNIVERSITY

HOUGHTON MIFFLIN COMPANY

BOSTON · NEW YORK · CHICAGO · DALLAS · SAN FRANCISCO

The Riverside Press Cambridge

LIBRARY
DODGE CITY COMMUNITY

371.5
Selc

COPYRIGHT, 1928, BY J. B. SEARS

COPYRIGHT, 1918, BY J. B. SEARS

ALL RIGHTS RESERVED, INCLUDING THE RIGHT TO REPRODUCE
THIS BOOK OR PARTS THEREOF IN ANY FORM

3564

The Riverside Press
CAMBRIDGE · MASSACHUSETTS
PRINTED IN THE U.S.A.

EDITOR'S INTRODUCTION

THE plan followed in the development of the present addition to this series of textbooks is so well stated by the author in his Preface as to call for but little in addition from the editor of the series. That the author has worked out quite successfully the plan he has followed, and has produced a stimulating and a useful book, will doubtless be proved by its future use as a textbook for teachers in training, and as a reading circle book for teachers in service.

While not neglecting the psychological aspects of the problems of school management, the author has placed special emphasis on classroom organization and control as a social problem of large potential importance. Regarding the school as a great social instrument, education as a process of social adjustment, and school management as a constructive social undertaking to the details of which the most careful thought should be given, he has stressed the importance of the teacher conceiving clearly the important social purpose of the educative process, of making definite plans for classroom organization and control in the light of well-established social aims and demands, and of knowing how to determine the effectiveness of her labors in standard social as well as psychological terms. The volume is essentially a treatment of the old and ever-present problem of school management from the point of view of modern sociology, rather than from the psychological angle. While containing numerous practical hints and suggestions for the management of the details and the orderly conduct of classroom procedure, these, too, are stated in terms of a great underlying social purpose rather than as devices of the *do* or *don't* variety.

The prospective teacher who studies this volume carefully while in training, and tries to answer the thought-provoking questions found at the close of each chapter, can hardly fail to go to the work of the classroom possessed of an important and highly useful insight into the deeper social values of good classroom organization and control. Teachers in service also, especially such as have but recently entered the service, should find the book equally helpful for professional study, because its practical suggestions and important social point of view can be appreciated even better in the light of some classroom experience.

Part IV is a very desirable addition to the usual volume on this subject. The chapter on "The Teacher's Personality" is an excellent statement, and one which any teacher could read and re-read with continual profit to herself and her school. The next chapter sets forth an excellent program for personal development and professional progress. The importance to the teacher of health is emphasized in another well-written chapter; and finally, the teacher is told how she may measure her social usefulness and how she may set herself right in her personal, official, and community relations.

It is a pleasure to introduce, to the educational public and to the many new teachers this book will reach, so helpful and so stimulating a volume by a former pupil and a present colleague.

ELLWOOD P. CUBBERLEY

NOTE TO REVISED AND ENLARGED EDITION

During the nine years since this book first appeared the general philosophy of education which it had attempted to interpret for use in the classroom has changed but little. The implications of this philosophy for practice have been greatly clarified, however, and much more generally accepted. This tendency has been furthered to a large extent by the application of scientific method to the study of education. The survey movement, which began only two decades ago, seemed to open wide the door that had been so nearly closed between the science and practice of education, with the result that both have greatly profited.

For the schools the past decade has been an important period. Investigation and experiment applied to curriculum construction, to the work of supervision, to the field of tests and measurements, to textbook-making, and to schoolhouse construction have shown outstanding achievements. The implications of these attainments for the work of the teacher are large and important, as also are the many studies that have dealt more directly with the field of method and management. Meantime, too, teacher-training courses in our universities, colleges, and normal schools have raised the standards of their work. Together, these facts have seemed to the author ample justification for the present revision and material enlargement of this book.

In making the revision several of the chapters have been extended and in some cases largely rewritten, a new chapter on the teacher and supervision has been included, a collection of practical problems has been appended to the different

chapters, while throughout the book much new concrete material has been added. An increased emphasis has been given, too, to the teacher's contact with the work of the principal and the supervisor, an emphasis which is believed to be in line with the general tendency to enlarge the responsibilities and so to increase the dignity of the position of the classroom teacher.

It is a pleasure to acknowledge here the many helpful suggestions the author has received through the letters and comments of interested readers.

JESSE B. SEARS

PREFACE

THE management of a school is a many-sided problem, lying, roughly speaking, between the intimate details of teaching method at the one extreme, and the coarser adjustments of administration and supervision at the other. As the term implies, the task is essentially an executive one — the manager, that is, the teacher or the principal, being a director of the activities of children in their pursuit of an education.

The functions of this teacher executive are not only to direct; she must also formulate much of the policy she is to execute. To do this she must have some knowledge of the essential working principles upon which organization and management rest. These principles have been set forth in this book, not so much as a theoretical treatise, but rather by showing, as concretely as possible, how such principles are to operate among the plain practical facts which are to be dealt with in actual school situations.

It is assumed that in managing a school the first step is a clear aim; the second, carefully formulated plans; the third, execution; the fourth, evaluation of results. Thus, by implication, it is demanded of school managers that they shall take a critical attitude toward their work, and dismiss the idea that experience is all that counts in preparation.

The book is divided into four parts. In Part I the problem of school management is set forth. The broad social aim and character of education and of the school as an institution are emphasized, and the essential relationship between a clear aim and any trustworthy plan of action is explained — all these in their relation to the two large sets of factors, natural and environmental, in respect to which management is to be effected.

In Part II the discussion centers about the pupil as the object of management, showing how the school is to help the child to develop a real sense of membership in the group. This brings up questions of attendance, order and discipline, punishments, and incentives, with constant emphasis upon what the school can do for the individual child.

Part III describes the machinery necessary for managing children in groups, and explains the process by which such means may be made effective in achieving the principal educational aims. The organization of children, of subject-matter, of the day's work, of the physical features of the school; the directing of study, recitation, and recreation; and, finally, the ways and means for measuring results achieved, are dealt with here, not as isolated structural parts, but as dynamic features of institutional life.

Part IV undertakes to sketch out and to point the way toward the attainment of a set of standards in personality, professional development, health, and methods of work for the teacher as the instrument by means of which society hopes to attain its educational aims.

The book is designed as a text for college and normal-school students and for teachers in service. It has avoided over-technical treatment, but wherever recent scientific studies have made it possible to substitute fact for opinion, these studies have been liberally drawn upon. The purpose has been to prepare a readable book which may help toward placing the management of our schools upon a more scientific basis.

The author is substantially indebted to the editor of this series both for important suggestions and for continuous encouragement, and to Professor C. E. Rugh, of the University of California, for the privilege of reading several excellent unpublished manuscripts bearing on certain phases of the subject-matter of this volume.

JESSE B. SEARS

CONTENTS

PART I. THE NATURE OF THE PROBLEM

I. The Meaning and Aim of Education . . 3
II. The Function of the Aim in Management . 21
III. Human Factors Concerned 31
IV. The Environment and Teacher as Factors . 43

PART II. THE PUPIL AS THE OBJECT

V. Membership and Attendance 55
VI. Order and Discipline 66
VII. School Punishments 83
VIII. Incentives in Management 99

PART III. THE MACHINERY AND THE PROCESS

IX. Organizing the School 123
X. Grading and Promoting 138
XI. The School Curriculum 170
XII. The Daily Program 195
XIII. The Class Studying 220
XIV. The Class Reciting 241
XV. Testing the Effectiveness of the Machinery and the Process 265

PART IV. THE TEACHER THE INSTRUMENT

XVI. The Teacher's Personality 293
XVII. The Teacher's Training and Growth . 312
XVIII. The Teacher's Health and Recreation . 335
XIX. The Teacher and Supervision . . . 348
XX. The Teacher at Work 375
Index 393

FIGURES

1. Berkeley, California, Plan of Instruction . 140
2. The Distribution of Intelligence 146
3. Distribution of Work done in Addition . . 148
4. Group Progress with a Course of Study . . 154
5. The Cambridge Plan 155
6. The Differentiated-Course Plan . . 156
7. A Teacher Efficiency Score Card 321
8. Machinery necessary to the Supervision of Instruction 354

TABLES

1. Mental Ages and Quality of School Work 149
2. Relation of School Success to Binet Intelligence Quotient 150
3. Age-Grade Norms for the Beginning and End of Each Half School Year 162
4. Age-Grade Data for Beginning of Year . . 163
5. Distribution of Time by Grades and by Subjects, One-Teacher Schools of California . 206
6. Distribution of Time by Grades and by Subjects in 49 City School Systems 206

CLASSROOM ORGANIZATION AND CONTROL

PART I

THE NATURE OF THE PROBLEM

CLASSROOM ORGANIZATION AND CONTROL

CHAPTER I

THE MEANING AND AIM OF EDUCATION

Outline of Chapter

1. Education as the free expression of native impulse: Education essential to life — The necessity for personal adjustment — Ideas and actions essentially related.
2. Education as inhibition in terms of social demand: Education not wholly individualistic — Learning to meet social demands — Natural *versus* artificial education.
3. The general aim of the school: No opposition between social and individualistic bases of aim — General aim from child's point of view — General aim from society's viewpoint — Need for specific statement of aims.
4. The more specific aims of the school: (*a*) Health and physical vigor as an aim — (*b*) Morality as an aim — (*c*) Knowledge as an aim — Knowledge useful for action — (*d*) The vocational or utilitarian aim — Right and wrong interpretations of this aim — making this aim effective — (*e*) The æsthetic aim — (*f*) Other aims.
5. Summary — Questions — Problems — References.

1. Education as the free expression of native impulse

No one is in greater need of a clear conception of what education means than is the classroom teacher. The one who is to direct the child in the long program of becoming a man or woman must have some notion of what that program involves. It is not enough merely to learn a verbal definition of education, such as Plato, or Milton, or Herbert Spencer wrote, and then go on in the traditional way, "hearing recitations." Education will mean "life," or "preparation for life," or "development," or "growth," or "adjustment," or "change," in a real and vital sense, only when the teacher manages the school in those terms.

Education essential to life. We are too often prone to forget that whatever produces change or growth in the child is in that sense educating him, and that at most the school

plays but a small part in the sum total of a child's training. However, the fact that most of our education is obtained in a way purely incidental to ordinary life procedure only lays a heavier responsibility upon the school for making the most of that small amount of time which is devoted specifically to school work. If the school is to live up to this responsibility, it must give the child no false directions.

Less than two centuries ago Rousseau saw that learning was essential to living, and suggested what has been more clearly stated since, namely, that the very same laws which underlie the processes of ordinary life activities are the fundamental laws of learning in the school. This seems obvious enough when stated, but, lest we might commit it to memory as one more interesting pedagogical axiom to be remembered, but not applied in managing a school, let us examine the suggestion more closely.

The necessity for personal adjustment. First of all, when the child finds himself in a new situation in the nursery among his toys, on the lawn with his dog, or in a quarrel with another child, learning is essential if he is to succeed in making the adjustment which he desires to make. Since all of life is new to the child at first — all people, all places, all things, all his own movements even — it follows that necessity for learning confronts him at every turn. And this idea of *necessity*, as a feature of the learning situation outside of school, is too frequently overlooked when we enter the classroom, where we too often attempt to manage children in terms of adult notions. The numberless movements of the child — his looking, his listening, his turning, his touching everything — are necessary parts of the continuous process of making himself comfortable in the midst of many strange situations. The school should not attempt to put an end to this ceaseless wiggling, for it is thus, bit by bit, that the child constructs the world he will live in as an

adult and through which he will become aware of his own impulses, interests, and powers.

The school must help the child to create new needs for himself, of course, but it must take care not to confuse things really needed with things imposed from without.

Ideas and actions essentially related. Again, if we watch the child as he is learning in his big free world out of doors, as when he is shouting from the top of a tree, or bending over a puddle trying to capture a polliwog, or taking to his new toboggan for his first slide down the snowy hillside, we note a peculiar eagerness in his tones and movements which tells, not only that he is swinging forward to meet these adjustments with a will, but that all the vigor of his will is accompanied by a feeling of exhilaration and of joy in the doing and shouting. It is no set task, or master from without, but the feeling of mastery within that drives him to achievement after achievement.

With him there are no ideas without actions to carry them out, no mere listening or learning about things, but in this real world of his all learning is accompanied by doing. Various psychological terms come to mind here, such as interest, feeling, and will, but we need not pause for such an analysis of the process of learning. Our interest is rather to describe what a few simple observations may bring to light as we examine the process under natural, as opposed to artificial, circumstances, to sketch a true picture of that process as it is taking place according to nature.

2. Education as inhibition in terms of social demand

Education not wholly individualistic. But this is the meaning of education as it pleases the child to educate himself, and not as it may please others to have him educated. And yet the school we are to manage is not a school of Robinson Crusoes, but a school in a democratic State.

Wherever we find a child — on the street, on the playground, at the market-place, in the bank, or church, or dining-car — he is forever inhibiting his own first impulses in order to meet the likes, or maybe the commands, of others. *Obedience* is the word, so important in the proper exercise of our rights and duties in a social world.

Education, then, has a broader meaning than we have outlined above. It is not a mere matter of following one's own interest or enthusiasm. It is not so individualistic as that. In the same sense that a child feels impelled to climb the highest tree, he may also feel impelled to restrain himself where his companion's rights or wishes are involved. But this restraint is a different kind of experience, and will often be exercised with reluctance rather than with pleasure. Yet obedience to the will or the wishes of others is essential in a social life, where coöperation is the basis of unity, so we are also concerned with the meaning of this kind of learning as we see it in process outside of the school, and ask: How does the child learn the sort of obedience or coöperation or inhibition which the social world will demand of him?

Learning to meet social demands. A child's first impulse is likely to be to refuse to share his sled with his playmate, whereupon he shortly finds himself playing quite alone. Upon the playground he insists that the game shall be tag and not ball. Soon the game of ball is in full swing, and while he stands pouting he is embarrassed with questions as to whether he has been hurt. He takes his own time crossing a busy street and is shocked when the policeman suddenly pulls him from in front of a passing vehicle. At a public gathering he talks in a hoarse whisper and suddenly finds himself being stared at. Thus it is that the world teaches him to obey the laws of common social usage. It is not a mere case of being suppressed, but a case of making an adjustment where others besides himself are con-

cerned. The boy shares his sled with the other children rather than suffer that feeling of loneliness. He enters the game selected by other children, he moves rapidly and attentively in crossing the busy street, and ceases to whisper in the public assembly, all because he desires the social sanction of his acts. That is, he has been changed from a mere individual to a social person.

But learning to restrain our impulses is not always a disagreeable experience. Our contact with others is not always a clash. The most delightful team work the child does on the playground involves a continuous process of inhibiting his own impulses. It is a matter of obedience to the rules of the game; not obedience which suppresses, but obedience which directs and gives meaning to the activity.

Natural *versus* artificial education. Education, then, is doing, acting out one's own or another's will, experiencing, adjusting one's self to real situations, conforming or coöperating here, resisting or striking out alone there, always answering to the call of necessity with ideas, but with ideas put into immediate execution. It is this latter point which seems to contrast the meaning of education as nature provides it with that we see in the formal, isolated, informational education which we too often find in the school. It is not merely to contrast the ideal with the real and practical meaning of education, but rather to force upon us the simple fact that education is merely the natural process of making needed adjustments to our social, physical, æsthetic, moral, and intellectual environment, and that the world regards that man as educated who makes those adjustments accurately, speedily, and sympathetically. Education must therefore mean not merely growth, or adjustment, but growth or adjustment with respect to a wide variety of social as well as physical situations to be faced in the world in which the child lives, and with respect to situations which are his very own.

3. The general aim of the school

No opposition between social and individualistic bases of aim. What, then, should be the aim of the school? Obviously it should be to facilitate the processes of growth described above. These are extremely broad in their scope and significance, including as they do the physical, the intellectual, the æsthetic, the moral, the economic, and the social, and involving modes of activity peculiar to each of these types of experience.

Our aim, then, must be cognizant not only of the needs of the individual, but likewise of the needs of society. Nor should we assume that these are at cross-purposes with each other. No child is going to live outside of society, and since he is what he is because of the life his own and thousands of generations before him have lived, it is futile to argue that the social and individual instincts and impulses are at war with each other. It has been well said that "the individual's normal growth lands him in essential solidarity with his fellows, and that through the performance of his social duties and privileges the individual advances to his highest and purest individuality." [1]

The biological basis which educators have to offer for such a statement lies in the social as well as the personal nature of that equipment with which we are born, and which we therefore do not have to get by education. On the personal side, the child does not have to learn to cry, to wink, to take food, to shrink from a blow or a ferocious-looking animal; he does not have to learn how to feel hunger, fear, and wonder. On the social side he does not have to learn to imitate others, to enjoy group life, to feel bashfulness, sympathy, and shame. True, as he grows he will consciously inhibit and modify these native tendencies to

[1] See Baldwin, J. Mark. *The Individual and Society.* (The Gorham Press, Boston, 1911.)

act, but they are there, as original equipment, and quite as many seem designed to serve a social as a purely individualistic end.

General aim from child's point of view. In spite of this substantial unity of social and personal elements in the child's nature, however, there is still the practical possibility that the strong-willed individual may dominate the group to the extent of subordinating society to his own selfish ends. Also the reverse of this may happen, in which the child's individuality is suppressed by the demands of society, and so is permitted to play but a small part in his social functioning. Either extreme is undesirable. To direct the child in discovering the proper balance and relationship between these two sets of interests would seem to be the general aim of the school, so far as the individual child is concerned.

General aim from society's viewpoint. Wherever society is highly organized, it must, like the individual, become self-conscious, and for the sake of its own preservation, comfort, and progress must direct its energies with a clear purpose toward these ends. The school has arisen as an institution to serve this very function, and if this fundamental meaning of the school were more fully realized by the teacher, then this social responsibility or aim of education would express itself more fully in the organization, management, and instruction of the school.

Concretely, this means that the school is not only to give direction to free individual expression, but also to bring this free individual to a consciousness of his appropriate and rightful *privileges* and *responsibilities* as a member of society. It will acquaint him not only with the form of our government, but with the meaning of citizenship. It will teach him not merely to respect authority, but to feel a sense of loyalty to the principles which that authority is designed

to protect. In other words, it will so shape its organization and instruction as to give the child a fund of knowledge and experience which will help him to discover both the opportunities and the limitations within which he may hope to find his highest individual freedom. This defines the general aim of the school from the standpoint of society.

Need for specific statement of aims. This general statement of aim should afford the teacher a point of view from which to approach the task of managing a school, and an ideal to direct and inspire her in her work. For the more intimate guides to action, however, it is necessary to consider aims which are more immediate. The owner of a factory not only sets up business success as his ultimate aim, but various aspects of this larger purpose — the purchase of raw materials at the lowest price, the most economical organization of his plant, the simplest and clearest method of accounting, a knowledge of markets — present themselves as clear and definite problems, or aims, through which alone the ultimate goal of business success can be attained.

So in education, that aim which looks for a perfect adjustment of the individual to society must be made definite and concrete for immediate and practical use in the classroom. If children are to become socially efficient in the sense of being capable of rendering the greatest possible contribution to humanity, as well as to have capacity for enjoying to the fullest the richest gifts of others, *we must train and educate them physically, economically, intellectually, morally, and æsthetically.* Each of these interests then becomes a definite problem in education, so that when we say the school is aiming at physical training, the task becomes much narrower than when we make the aim social adjustment or efficiency.

An examination of each of these narrower aims should therefore help to make clear the more specific terms in

which the school is to be managed. It is not to be assumed, however, that any one of these narrower aims can be achieved entirely apart from the others. We can hardly think of any kind of physical training that does not involve intellectual activity, and much of it is closely associated with moral and social training. In outlining an aim, therefore, we are but defining the point of emphasis of the curriculum, or of the lessons or instruction in question.

4. The more specific aims of the school

(a) **Health and physical vigor as an aim.** With the ancient Greeks physical education was institutionalized in a national sense. But for more than a thousand years this worthy aim of the school was buried beneath the ascetic ideals of the mediæval monk, and, aside from the emphasis which chivalry placed upon this phase of training, the school gave little attention to the welfare of the body till well into the nineteenth century. But the developing humanitarian movement of recent times could not overlook such a responsibility for the school, and, like every other new interest of our age, this problem has been attacked by science, and one of the larger contributions to educational thought in recent decades has been the idea that care for the health and the normal growth and development of the child are legitimate functions of the school.

This conception represents the newer phase of the work in physical education, and is important in bringing the physician and teacher together in the task of producing a sound mind in a sound body. This gives to medicine a positive and constructive as opposed to a negative or merely curative aim, and brings to its aid the constant care which can be exercised only by the school. As a result our school work in formal gymnastics is now being reorganized and redirected by this newer aim, and plays and games which

were once indulged in for social reasons only are taking the place of much of the former drill. The social and moral values are not lost in this new work, but the health value is greatly enhanced, and mere physical strength is broadened to include motor control and the expression of personality or character.

To be effective in the management of a class, however, health and physical vigor must not be thought of as merely finished products to be attained. The teacher must have in mind a clear understanding of the child as he is, and of the various steps which the child must take in attaining this goal. There is the strong, healthy child, the average child, the undernourished, the sickly, and the crippled child, each with special needs. It is these special needs that must be defined, and their satisfaction must be set up as the teacher's aim. With these defined she must then be able to define and direct the processes (activities and exercises, emotional as well as physical) which will carry the child step by step from where he now is to where he ought to be. Thus, a study of this aim, brought down from its general to its specific form, forces us to face the course of study not only as a whole, but in its smaller parts, even to each day's assignment, as a step designed to change the child from what he now is to what he ought to be.

(b) Morality as an aim. Morality is not a mere matter of doing right or being honest, but of knowing when and where to do right and be honest; it is not merely a matter of not stealing, but of standing positively and actively for the protection of society against stealing, and of learning how to earn an honest living.

This makes the moral aim extremely broad and comprehensive, to be sure, but morality is a big fact in a social world. There are points of emphasis here, however, such as habits of personal cleanliness, fair play in group games,

respect for elders, all matters of common honesty and politeness, ideals of civic honor and of public service, and knowledge and judgment concerning the common moral situations to be met in ordinary community life. Training in these directions is essential, and practically achievable for the school. With the ever-increasing tendency of modern life to dissipate the moral influence of the home, this responsibility of the school cannot be shifted. The idea of service and coöperation as opposed to selfishness in these and other habits and ideals, and the ability to judge the right, are the specific points at which the moral aim finds its issue in the management and instruction of children.

The playground offers endless opportunity for a child to make moral decisions, and so a wealth of material through which the teacher may incidentally, in classes, in projects, in her discipline cases, in coöperative work, and in her conversation with children, bring this general aim of morality down to very specific aims. When a child has been unfair in a game the question of morality becomes a question of conduct. The aim now is to have the child reflect upon his act and discover for himself that it was wrong, and then as far as possible to lay the foundation for a strong prejudice against that sort of unfairness.

(c) **Knowledge as an aim.** Knowledge is perhaps the most obvious aim of all, and the one which has received the greatest emphasis in the school. To this there might be little objection were it not true that in practice we have thought of knowledge only in the narrow sense of information, the teacher's problem having been mainly that of seeing that children accumulate a prescribed quantity of facts. The school has too rarely raised the question as to what knowledge is for, and as a consequence its actual use has been too largely that of mere intellectual ornamentation.

As a practical school aim, knowledge must be regarded from the standpoint of its use, rather than from the standpoint of a finished product. Only when it has been applied to the solution of tasks, old and new, has its full value been realized. With young children, especially, knowledge must not remain isolated. With them it must be *knowledge how* — how to skate, how to sing, how to sew, how to speak and write correctly, how to be polite, how to enjoy music and poetry, each activity yielding information, but information tied up with conduct.

To illustrate further: The date of 1492 is often taught merely as the date of the discovery of America by Columbus. In such isolation it is almost void of meaning. The date can have little meaning until the child is given a setting for it. What was going on then? What was there in Europe and America? Who thought of doing that? How did people live then? When such a fact has a rich setting it then has significance, and only then is a real knowledge-aim achieved.

We seek knowledge only that we may act. Recognizing this meaning of knowledge as the one of first importance for the school is only taking account of the natural motive a child has for getting knowledge, namely, in order that he may *do* something. Gradually, however, as the child is able to conceive future or remote, as well as immediate, needs, information not immediately applicable may become a legitimate aim. A knowledge of geometry, of the Euphrates Valley, of the technique of language construction, of a foreign tongue, to a considerable degree may remain in the child's mind as information, but always with the idea that it is to be applied in getting more knowledge in the college or university course later on.

This brings us to a particular point of emphasis in connection with knowledge as an aim, and that is the use of

knowledge in getting more knowledge.[1] How to study, once a motive for study is present, is a constant problem, not only in the school but everywhere. Not to recognize this is to ignore one of the most important functions of the school. We must not only impart the accumulated knowledge of the past, but cultivate method and zeal in getting new knowledge. In a democracy every child must be a discoverer.

(d) **The vocational or utilitarian aim.** The cultural and the utilitarian in education have long been set over against each other as if mutually exclusive; and so they were in a sense. When education was for the leisure class only it was not necessary that it should be of a sort useful in making a living; consequently a knowledge of the classics and of mathematics served well to separate the "cultured" from the "uncultured." In those days industrial life was simple, and by a crude and wasteful system of apprenticeship the industries trained their own workers. But to-day, with the rising tide of democracy and with industries highly mechanized, education is for all, and the demand is for trained workers.

This necessitates a new definition of culture, which is slowly but surely working itself out under the new conditions. It also places upon the school the new and important task of training for other than the merely professional vocations. There are the trade, industrial, commercial, agricultural, and home-making pursuits to train for, and the school is asked to formulate aims to meet these new demands. Such aims cannot be formed by pushing the responsibility back upon the occupations. The school must see in these conditions the demand for practical as opposed to purely theoretical study, and arrange its curriculum, equipment, and class exercises accordingly.

[1] See Chapter XIII for a fuller treatment of this problem.

Right and wrong interpretations of this aim. The danger which the school faces in undertaking this new aim lies in the natural inclination to interpret this new training in terms of its disciplinary value at the one extreme, or in terms of the degree in which it merely facilitates the earning of money at the other. No such false interpretation as the former, or narrow interpretation as the latter, can possibly be accepted if we insist upon the meaning and general aim of education which we have set forth above. No training could be counted utilitarian from the school's point of view if it is so narrow in its use as to be unsocial. It is not training to earn a living merely that is wanted, but training how to live intelligently and happily on what we earn as well.

Making this aim effective. For us to ignore the responsibility of the school as a means of bringing the child into a proper attitude toward the work side of life, and into some understanding and some appreciation of the processes by which society gets its food, shelter, and clothing, is on the face of things quite absurd. If this responsibility of the school is recognized, however, the general aim above stated must be made specific for each subject and for the various school activities. Arithmetic problems must come out of the work of the shop or the business with which the child has daily contact and actual responsible contact. The correct language must become the language of the playground, the street, and the home. The school club, or society, or student body rules must be the rules of business and political life, and the child must sense the fact that they are. Justice on the playground must be the justice of the courts discussed in civics. Only by such thinking and planning can the teacher bring the general aims of vocational training to bear fruit in the management of her pupils.

(e) **The æsthetic aim.** To be able to enjoy the beauties in nature and in art is to have access to constant sources of

inspiration. To be able to enjoy a landscape, or to catch the vision of the poet, the musician, or the painter, is at least in some degree possible for us all. Landscape and cloud effects cannot be fenced in, art galleries and libraries are open to all alike, and however busy we may be with the problem of earning our bread, yet there is time amid the toil for us to tap these rich sources of pleasure if only we learn how to see them.

Aside from the individual pleasures which children may derive from such sources, the school must not ignore the fact that common æsthetic ideals and pleasures rank along with common political and religious ideals as bases for social solidarity. When two people find that they see the same beauty in a picture they are thrilled by the discovery of a new means of communication. If all the people who visit the park could see the beauty which the artist finds in the shrubbery-fringed lagoon, the park would by force of this fact become a social center. We cannot all go to the park, or to the opera, but we can all see the fields and the sky, we can all read poetry and enjoy pictures, and we can all listen to Victrola or radio music, and it is the business of the school to make of these æsthetic experiences a common language.

(f) **Other aims.** We have by no means exhausted the number of aims. Those we have mentioned might be made still more specific and detailed as we apply them in selecting our subject-matter and in working out our methods, and many others might be stated. We might speak of skill, of information, of good manners, of respect for expert work, of methods of study, of graceful movement, of industry, of honesty, of civic duty, of good recitations, of school loyalty, of good spelling, of rapid addition — all — as aims, for training to all of these ends is within the legitimate function of the school. Yet each of these is included under one or more of the above captions, and to discuss them further would be to

discuss separate phases of the subject which this book can cover but briefly.[1]

The point to be emphasized here is that the teacher needs to have a broad conception of the meaning and end of her work, and some clear notion of the several larger purposes, in order that the details of daily problems may be dealt with in their proper perspective. Is the particular plan selected for handling a given situation, such as the passing of wraps or the collecting of papers, conducive, in as large a way as is possible, not only to meeting those immediate needs, but to giving training and experience in the direction of the broad social and moral aim of the school? This is the question which the teacher must keep constantly in mind in the conduct of her school, if she is to apply anything like scientific method to its management.

5. Chapter summary

We have seen that education gets its meaning from the character of human nature itself. Not human nature in isolation or quiescent, but human nature in society and in action. Starting from one set of instincts, education is free self-expression; from another, it is the inhibition of the impulsive self in terms of the claims of society. The conflict between these views is only apparent, and the aim of the school is to facilitate the child's development in both these directions, to the end that the man will be also the citizen.

The teacher needs to state her school aims in the light of these larger facts and principles. This can be done only when we think of the social and individual needs which the child must face in his expanding world. Every child must maintain life and keep himself physically fit; he must deal justly with his fellows; he must rationalize his conduct, and know the world of facts with which he must cope; he must earn his bread; and he must enjoy life. Thus we set up the physical, the moral, the knowledge, the vocational, and the æsthetic aims, in terms of which the school, the curriculum, the

[1] For further treatment of this subject see books on teaching methods and on theory and principles of education.

children must be organized and directed. Making these aims specific for the various courses and activities of the school is the responsibility of the teacher.

QUESTIONS FOR DISCUSSION

1. What are some of the most important things a child learns outside of the school?
   a. Does the school offer any opportunity to the child to learn these same things?
   b. What part of a child's school experience, if any, seems to you to give support to these things?
2. Mention some school experiences which are designed to teach the child to inhibit his own selfish impulses in favor of the wishes of the group.
3. At what points is it possible to misinterpret the cultural and utilitarian aims of the school so that they represent conflicting purposes?
4. In what sense is it the duty of the school to teach obedience?
5. In what way may supervised play be useful in carrying out the moral aim as discussed above?
6. Name several special aims which could be appropriately classified under the physical aim. Analyze each of the other aims similarly.
7. What specific and what general aims do you expect to achieve by a given system of distributing wraps?
8. Explain the influence of prizes in school work in terms of their effect on social and moral training.
9. If to impart knowledge is one of your aims, what school work do you include under the term knowledge?
10. What studies would be most useful for æsthetic training?
11. Explain the function of a well-decorated, well-lighted and ventilated, properly-seated and equipped room, in the achievement of the above aims.

PROBLEMS FOR STUDY

1. Explain how the child builds up the concepts that are to guide his thinking and conduct in political, in social, and in economic matters.
   a. What are some of these concepts?
   b. What can the school do in determining their character?
   c. How is this latter problem connected with project work, with opportunity rooms, with the extra-curricular life of the school?
2. In the following figure:

   x——y

   let x stand for the teacher and pupils at work (or play, or a conference in a discipline case). Let y stand for the general aim of "health," or "citizenship," or "worthy use of leisure," or "social efficiency," or

"vocation," or "worthy home membership." Let the line indicate distance or the problem of making this general aim specific for the immediate need of the situation x. For instance: The general aim of the course in hygiene is "health." By accident a pupil has received a severe wound. The children saw the wound and watched the nurse dress it. In class the teacher uses this case to explain certain facts about bacteria: How they attack a wound that is not perfectly clean, how they are certainly present in such a wound, how to destroy them, and what will happen if they are not killed. Apply this scheme of analysis to several different types of management situations, as "punishing a child," "organizing a group project," "conducting a history recitation," or "organizing a club."

REFERENCES FOR ADDITIONAL READING

Bagley, William C. *The Educative Process*, chap. I. New York, The Macmillan Co., 1905.

Bagley, William C. *Educational Values*. New York, The Macmillan Co., 1911.

Bobbitt, Franklin. *How to Make a Curriculum*, chaps. I to III. Boston, Houghton Mifflin Co., 1924.

Bode, Boyd H. *Fundamentals of Education*. New York, The Macmillan Co., 1922.

Charters, W. W. *Curriculum Construction*, Part I. New York, The Macmillan Co., 1923.

Dewey, John. *Democracy and Education*, Part I. New York, The Macmillan Co., 1916.

Kilpatrick, W. H. *Foundations of Method*. New York, The Macmillan Co., 1925.

Mellzier, Hyman. *Children's Social Concepts*. New York, Teacher's College Bureau of Publications, 1925.

Monroe, Walter S. *Teacher's Objectives*. University of Illinois Bulletin, XXIII, no. 39, June 1, 1926.

Peters, Charles C. *Foundations of Educational Sociology*, chap. IX ff. New York, The Macmillan Co., 1924.

Snedden, David. *Sociological Determination of Objectives in Education*, chaps. I, XI, XII. Philadelphia, Lippincott, 1921.

Strayer, George D. *A Brief Course in the Teaching Process*, chap. I. New York, The Macmillan Co., 1911.

Waddle, Chas. W. *Introduction to Child Psychology*, chap. I. Boston, Houghton Mifflin Co., 1918.

Wood, Thomas D., and Cassedy, Rosalind. *The New Physical Education*. New York, The Macmillan Co., 1927.

CHAPTER II

THE FUNCTION OF THE AIM IN MANAGEMENT

Outline of Chapter

1. The changing point of view.
2. Theory and practice must join hands in the schoolroom: Traditional *versus* personal methods in management — Theory *versus* tradition — Importance of the modern social aim — Means and method dependent on aim.
3. A clear aim makes for efficiency: Mistaking means for ends — The pin-fall-quiet theory — An indefinite aim makes for loss of time — Relation of aim to motive in work — Clear aim essential in habit formation — A clear aim insures a critical attitude.
4. The teacher's problem: How to bring this discussion to bear in practice — Illustration of how to use it.
5. Summary — Questions — Problems — References.

1. The changing point of view

The traditional schoolmaster gave little thought to the why of his work. He expected the children to learn their lessons, and to recite them, remembering to be properly submissive to the teacher's authority, which authority was symbolized by a long list of rules and a birch rod, both conspicuously displayed in the classroom.

Under the old régime there was little thought of education as development. The child was regarded as a little man, and accordingly the aims of instruction and management were crudely stated in terms of adult needs. This attitude dominated education until social and economic pressure had forced upon the school a broader function, and until a more scientific knowledge of the child, of society, and of the educative process had made possible a reinterpretation of its aims.

To-day the school is expected to turn out a definite product. This means that the teacher must not only know the materials and forces with which she must work, but that she must be able to shape and to direct these to the ends desired.

2. Theory and practice must join hands in the schoolroom

Traditional *versus* personal methods in management. It is not enough to study the aims of teaching as we study a lesson in history. As our study of the child, of subject-matter, and of society gives us the basic principles upon which we construct our general educational theory, so this theory must enter into the making of the plans and devices by which we govern children in the schoolroom.

It is much easier to study about the aims of school management than it is to keep a constant check on one's own teaching, to see that those aims are being realized in the form of stronger, more intelligent, and more socially effective children. It is easier to accept the traditional modes of procedure in class work, to apply the same penalties for petty offenses, to keep records, and give tests, in the same way year in and year out, than it is to make new plans to meet the changing needs. It is easier, in other words, to avoid the responsibility of knowing the definite purpose of each plan and device which enters into the management of the room, of stating the extent to which that plan is being realized, and then of revising procedure where shortage in achievement is discovered. That is, it is easier to dawdle, to guess, to be irresponsible, than it is to apply industry and intelligence in the execution of a constructive program which has been planned to accomplish a given end.

Theory *versus* tradition. When we can give no scientific reason for doing a thing we usually rely upon tradition to guide us. The mediæval dictum, that the child is born in sin and is therefore by nature bad, gave rise to a pedagogical practice which was designed to suppress all native impulses in children and to enforce a rigid discipline through a hard-and-fast, machine-like organization. This point of view, essentially characteristic of all phases of mediæval civilization, fastened itself upon the school as one of its

most harmful traditions — harmful because it prevented just what we have described above as the normal process of education. That tradition is not as yet dead. There are the militarists in school management to-day, and on the whole they are true to their mediæval ancestry in the sense that they offer no scientific justification for their practice. Their aim is determined for them; they are cogs in a great and ancient machine which ignores progress as a fundamental characteristic and ideal of our age.

Importance of the modern social aim. The teacher who has developed a scientific notion of the aim of education, is confronted with the force of just such unreasoned pressure as this, when she attempts to put these notions into practice. She is everywhere hemmed about with the traditions of the past, and, unless she is willing to conduct her school in terms of the needs of a civilization that no longer exists, she must guard against the natural tendency to take this traditional line of least resistance. The only way to fortify against this is to cease to be directed by inspiration, or luck, to provide one's self with a rational purpose, adapted to present-day needs, and to make that purpose a constant check on practice at every turn.

Means and method dependent upon aim. The reason that teaching without a clear aim is bound to lead to more or less chaotic procedure is because of the fundamental relation between the end sought and the method by means of which that end is to be realized. If I do not have clearly in mind what it is I wish to do, I can scarcely hope to choose the most intelligent method for doing it.

When a fire alarm is sounded, every teacher and pupil must get out of the building as speedily as possible. The fire drill is a method of training children in those particular types of coöperation and self-control which are necessary to achieve this end. Certainly such coöperation and self-

control could not be obtained if the drill called the children out one class at a time. This illustrates very simply how the means, or method, is practically determined by the aim in view. In other words, *real training or education can only result when the conduct or management is directed in terms of a predetermined aim.* Therefore, any management which is not clear and specific with respect to its aim cannot be economical, or in the highest sense educational. It is almost as true to say that *the aim is not well defined until the plan by means of which that aim is to be realized is fully outlined.* And this principle applies just as fully in the details of learning to write, or to draw, as it does in the movement of pupils, or in the distribution of supplies. Let us now illustrate.

3. A clear aim makes for efficiency

Mistaking means for ends. Since the method and the end in school management are so intimately bound together, it is obvious that the teacher who has a well-defined aim has taken an important step in the direction of efficiency. Efficiency in management insists first of all upon getting results, and in getting those results it insists *that every moment of time, and every part of the school machinery, shall give an educational account of itself.* Or, stating it negatively, that no false moves shall be made, no unsatisfactory habits formed, no purely suppressive measures used, and no uncritical procedure followed.

Every teacher will readily sanction this, but it must be remembered that it is more easily read than practiced. The *do* side to school management is a problem in itself, which every beginning teacher must face. This may make clear what to do, and what not to do, and later chapters may explain the *how*, but there will still be left the actual execution, which will call for clear thinking and persistent effort.

The pin-fall-quiet theory. Without a definite notion of what is to be accomplished one may easily mistake means for ends. A quiet schoolroom is only a means, and yet how often the ancient schoolmaster has prided himself upon being able to hear a pin fall in his room. How often, too, has that achievement been made at the cost of a free and cheerful atmosphere of work. The reason a schoolroom should be kept quiet is that quiet is one of the conditions under which attention can be concentrated, work can be done, and right work habits built up.

We must remember, though, that the habits developed here are for use in the outside world where there are many distractions. Hence, work habits which are developed in an absolutely quiet room are not only developed under repressive measures, but they defeat their own end by unfitting the child for thinking and working under normal conditions outside the schoolroom. This is but a single illustration of how the teacher without a clear aim is misled into thinking her task is done, when in reality it has only begun.

An indefinite aim makes for loss of time. If a clear aim is insisted upon throughout the entire day, then recess periods can no longer be thought of as temporary relief from hard work. They may mean this, but they must mean more. They must mean play or change of work which does not allow a large percentage of the children to stand around as if waiting for the next thing to happen. All must play, and that play must be designed to yield definite social, recreational, moral, and intellectual values. This it will not do if left undirected and aimless. Play must be supervised, just as study is supervised, and when some tangible aim is set up for it to achieve we shall realize that no inconsiderable part of a child's education, as defined in chapter I, will be accomplished during these moments of the school day which, until now, have been regarded as waste time.

But the recess period is not the only point at which moments slip by without yielding an educational output. How much time is consumed in getting into action when the class assembles? What is the speediest and most educative method of distributing supplies and wraps? Are children permitted to bring useless and impertinent ideas and facts into the class discussion? Is a poorly prepared pupil permitted to consume an unreasonable portion of the class period in trying to bluff through a recitation? These are among the hundreds of loose joints we find in schoolroom work. If our aim insists that every moment shall render educational account of itself, there will be a general tightening up of the program throughout the day.

Relation of aim to motive in work. Time, however, is not the only measure of waste in school work. Lack of a clear aim not infrequently provides a wrong motive. Thus children may march into the room in good order, not because they care for, or see any point to that kind of training, but for fear that if they are disorderly they may have to remain after hours and study. The motive here is fear of punishment, and not a desire to coöperate in an effective method of getting into the room quickly and in good order, or to learn to walk in good form.

Clear aim essential in habit formation. Likewise in the matter of habit formation a carefully studied aim is necessary to insure right procedure. To develop the habit of neatness in respect to language papers, and carry the idea no further, is to build up a habit which, unsupported by others of its kind, is so specific and narrow in its application as to be next to useless in after life. How much better to consider the full importance of neatness as a virtue, and insist upon a hundred habits of neatness instead of one. Neatness in all written work, in dress, manners, and wherever it applies, indoors or out. The difference between

these two conceptions of what to aim at in the matter of formulating plans for the development of habits of neatness is just this: In the one case the habit serves one narrow aim, which may or may not carry over into letter writing or preparation of documents in after life; in the other the single habit is so supported by others as to make it a guarantee against slovenliness in any line at any time. It is probable, too, that the building-up of the large number of habits of neatness will consume but little more of the teacher's energy and time than will the driving in of the isolated habit in respect to language papers alone.

A clear aim insures a critical attitude. We also must not fail to see that a clear aim tends to keep the teacher constantly critical of her own work. She does not follow a plan which shows no promise of bringing about certain preconceived results. She reads books, listens to addresses, and studies the reports of experiments and investigations more intelligently because at every point they are criticized in the light of some function which they may perform in her own work. She is more sympathetic with children, because her aim is always with respect to the individual child. She makes the greatest possible use of supervision, of teachers' meetings and conferences with her principal, because she does not listen meekly to what her superiors tell her without demanding of them answers to specific questions which have arisen in her own work, a thing she could not do if she had not constantly held her work to answer in terms of a specific end.

4. The teacher's problem

How to bring this discussion to bear in practice. This discussion becomes very specific as a teacher looks about for an explanation of what she is doing and how she is doing it. Wholesome surprise awaits the teacher who will carefully

scrutinize her course of study, her daily program, her plan of moving the children in and out of the room, her seating plan, her plans for handling wraps and supplies, her marking system, the classification of her pupils, her plans for looking after window shades and ventilators, and her standards governing such matters as the children's moving about in the room, going to the library, conversing with one another, keeping desks and room in order, and neatness in dress, courtesy, and correct speech — each from the angle here suggested. Specifically, why am I doing this in this particular way? Specifically, what is the aim of this course, this recitation, this or that routine procedure?

If a teacher will try to write down a justification for each plan, method, or device that she uses she will quickly find that there are at almost every turn in her work aims more desirable than those she has been using.

Illustration of how to apply it. Let us set down the aims of marching the children into and out of the building. On the face of things such a plan is formal and seems to destroy individual initiative. If we examine its possibilities we shall see that:

1. It saves time for school work.
2. It makes possible a casual inspection of the children as to dress, manners, health, and general attitude of mind.
3. It is good moral and social training, since it requires each student to fit into a moving program where attention to coöperation is necessary.

Whether these aims are realized will depend largely upon whether the teacher pursues them consciously. What will be training in purposeful coöperation if children enter into the spirit of it can easily become repressive if the children are opposed to it. If they are herded in and watched and spied upon they are very sure to act as prisoners act. When that is the case, they are not being trained in coöperation but in opposing social order.

Similarly, the inspection aim may become a menace if it is not kept to its true purpose. Or it may result in most friendly and helpful contacts with the children. A smile or a word may drive away tears and frowns, anger and disappointment, and restore self-confidence, happiness, and the desire to coöperate all along the moving lines of children.

There is not space to analyze other aims and plans, but this idea of checking over one's entire program of work is urged here as indispensable to sound management.

5. Chapter summary

To summarize the ways in which the aim functions in school management, then, let us remember that the modern school has moved away from the old hand-to-mouth and mechanical modes of school management, and in the direction of a scientifically-planned procedure; that the greatest enemy to scientific school management is the ignorance of fundamental principles and the consequent pressure of outworn school traditions; that sound theory will work; that a clear aim involves a critical study of the means and methods by which the aim is to be realized; that a clear aim leads to efficiency, because it counts every moment of time, demands results, and discards useless machinery; and that a clear aim reflects itself in the teacher's habits of thought and work and in the training of the children.

QUESTIONS FOR DISCUSSION

1. In what ways have the old conceptions of school management failed, and what is the basis of the new conception?
2. How has the mediæval doctrine "that the child is by nature bad" disappeared, and what has been the influence of the new aim on school practice?
3. Show by concrete illustrations from school-management problems how the aim very largely determines the method of procedure.
4. How might a strict adherence to the principle that every moment of school time and every part of school machinery must render educational account of itself have changed your own program when you were in the elementary school, in the high school, in the normal school, in college? Is this principle being enforced in your school?
5. Do you know of any school, or system of schools, which is carrying

out this principle with respect to the problems of play? What is the most suggestive literature on the subject for the teacher who would like to work out such a plan?

6. How, because of the lack of a clear aim, may the teacher fail to see that a child is performing a task from an entirely wrong motive, and so defeating the purpose of the school?
7. Can you recall any wrong or inadequate habits which you formed as a pupil in school, and which you need not have formed if the teacher had had a clear aim in view?
8. Cite cases of how a clear aim necessarily makes the teacher critical of her own work.
9. How will the teacher who works to a plan influence the children in respect to:
   a. Systematic methods of work?
   b. Economizing their time and energy?
   c. Actual work done, amount and quality?
   d. Attendance, promptness, tardiness, etc.?
   e. Discipline?

PROBLEMS FOR STUDY

1. At the close of this chapter is presented a very brief illustration of how a teacher may examine her plans and standards and devices. In a more extended way, analyze each of the following, showing how the proper aim or aims may be submerged or lost sight of because the standard or the piece of school machinery is not held *to give educational account of itself.*
   a. The plan of calling the class roll.
   b. The system of class marks.
   c. The plan for collecting and distributing papers or supplies.
   d. The plan for execution of fire drill.
   e. Any scheme or partial scheme for student self-government.
   f. Any special teaching device.
   g. The plan for handling an individual or group project.
2. Add other items to the above list.

REFERENCES FOR ADDITIONAL READING

Betts, G. H. *Classroom Method and Management,* chap. III. Indianapolis, Ind., Bobbs Merrill Co., 1917.

Bode, Boyd H. *Fundamentals of Education.* New York, The Macmillan Co., 1922.

Dewey, John. *Democracy and Education,* chap. VIII ff. New York, The Macmillan Co., 1916.

McMurry, F. M. *How to Study and Teaching How to Study,* chap. III. Boston, Houghton Mifflin Co., 1909.

CHAPTER III

HUMAN FACTORS CONCERNED

Outline of Chapter

1. The factors enumerated: Divisions of this book.
2. The child to be educated: The period of infancy — Immaturity an educational resource — The native equipment of children.
3. The school and the native equipment of children: The task of the school — The play instinct — The constructive instinct — The instinct to imitate — The instinct of curiosity — Other instincts.
4. How the child learns: The function of the senses — Principles of habit formation.
5. The problem of health: New interest in health questions — Health problems and school work.
6. Individual differences: No two children alike — Significance of differences for the school.
7. Summary — Questions — Problems — References.

1. The factors enumerated

Divisions of this book. In our brief interpretation of the meaning and aims of education we have had in mind: first, the native equipment of the child; second, the fact of continuous development or growth of the child; and third, the physical and social terms in which, and ends to which, that growth must be directed. Accordingly, any adequate treatment of school management must concern itself with three large problems, namely: the *child*, individual and social, as the objective of all management; the *process*, by which the environmental conditions are to be used in exercising control over his development, or over the methods by which his development shall take place; and the *teacher*, the agent through whom society directs the process. These problems will constitute the subjects for Parts II, III, and IV of this book.

2. The child to be educated

To know the child for educational purposes means to know the essential facts and principles regarding the child's

nature as these are involved in his development toward the intellectual, physical, moral, vocational, and æsthetic aims set forth above.

The period of infancy. Biologically the child is immature, both with respect to his organs and with respect to their functions. It is noteworthy that this immaturity is greater in its duration than obtains with any other animal known.

According to John Fiske, who first called attention to the importance of this period of prolonged infancy, those organs and functions which are perfect at birth rarely change very much, and are changed with great difficulty; whereas those which are not perfect at birth are easily capable of change. Not only, then, are early perfections, physical and mental, not conducive to further modification, that is to learning, but lack of such perfection makes learning not only possible but absolutely necessary.

Immaturity an educational resource. This makes immaturity a *positive* factor rather than a *negative* one. A set of forces is there, which are designed to perfect the adjustments of the child to the world he is to live in. These adjustments may be left to chance or given careful direction. Giving direction to them is precisely what is meant by conscious education. To the teacher, then, this immaturity, or infancy, means plasticity, adaptability, possibility for further growth.

Negatively it means that the child is not an incomplete adult, that childhood is not a time to hasten through, as if it were a period of waiting instead of a period of growing and living. It means that we are not dealing with organs or functions which are already fixed, with adjustments already made; that we are not to spend our time in breaking the child's will; and, most of all, that we are not to let a moment of time pass in which opportunity to direct the growth of the child may be lost.

The native equipment of children. That the period of infancy is a time in which the child is perfecting his adjustments to the world, and so a most important educational resource, does not mean that the child has no ready-made equipment for life when he is born, or by the time he enters school. He has an abundance of such equipment, and with the passing of years that abundance increases. These materials exhibit themselves *as tendencies to respond to certain situations in certain typical ways*, and are referred to as *reflexes*, or *instincts*, or *predispositions*, and constitute the *original mental make-up of man.*

When the situation is simple, and the response very prompt and direct, and the bond between them hard to modify, as the opening or closing of the pupil of the eye with decrease or increase of light, the tendency to respond is called a *reflex.* Where the situation is not so simple, the response more variable, and the connection more easily modified, it is referred to as an *instinct*, as, for instance, the tendency to pay attention to bright colors, sharp contrasts, and moving things, or to imitate the acts or seek the companionship of others. When the situation and response are both extremely variable, and the connection between them very modifiable, it is referred to as "*capacity*" or "*predisposition.*" Thus when a child responds readily and accurately to all kinds of musical or mathematical situations, we think of that child as having unusual capacity for music or mathematics.

3. The school and the native equipment of children

The task of the school. This original equipment is quite varied, and as yet has not been fully described. Enough is known about it, however, to offer many suggestions to the teacher. First of all, the school is largely concerned with just this task of modifying these original tendencies to act,

and in selecting the right modes of behavior and reducing them to habits. In the evolution of the human race this original equipment is of ancient origin, and must have served to adapt man to a far different life from that which he must now live. Consequently the child will display some instinctive tendencies which are not only not useful, but destructive in our modern society. These must be eliminated by preventing them from having a chance to get expression. Others will be useful in their original primitive form, and will need to be stimulated and nourished. Since some of them are transitory, it follows that if they are not promptly reduced to habits, the possibility of building upon them may be lost. Since they do not all appear at the same time, education must not only strike while the iron is hot, but must also be constantly on the alert for the appearance of new instincts. A brief discussion of some of the more important of these may be of service here.

The play instinct. The tendency to play is probably one of the most striking, and for education one of the most useful of these bits of native equipment. Play was frowned upon by our Puritan ancestors as being not only useless and wasteful, but positively wicked. To-day, under the direction of education, it is regarded as a most useful starting-point for many school processes. Through play the child not only becomes acquainted with many objects and persons, but, through the adaptations necessary in his games, he becomes conscious of his own powers.

A very large part of what the child has learned before entering the school he has learned through play. Thus have children always familiarized themselves with the fundamentals of the arts of peace and war. In his games he has sowed, harvested, hunted, invented, explored, argued, and fought. Nor have these playful achievements always resulted without serious effort. And the spirit of that effort

is one of the important subjects of study for the teacher who would have the work of her room pervaded by a similar spirit of freedom and of definite purpose.

The constructive instinct. The tendency of children to construct and to destroy is early noticeable. No object of interest escapes thorough handling. It is seen, touched, lifted, squeezed, turned, thrown up or down, accordingly as it is of quality, size, and weight to make such manipulation possible. The block house is erected and destroyed; the picture is examined, then torn to pieces or thrown aside. All this to the end that the child may more fully sense his world of materials, and find out the real meaning of his own acts or powers as their meanings are reflected in what happens to his materials as he toys or toils with them.

The teacher has only to understand the principles underlying such behavior to see that their conscious application will make number work, drawing, geography, and many other features of school work thoroughly concrete and objective. The child's idea of a mountain, a valley, an animal, or a temple, expressed in clay, is not only the best test of what he knows about these things, but it is the best starting-point for him in his effort to learn more about them.

The instinct to imitate. Unconsciously the child copies from the models about him. A properly arranged and decorated schoolroom, good organization and management, a teacher with correct speech, manners, and dress, and with kindly ways, all these are desirable models, and they are in large degree under the teacher's control.

The instinct of curiosity. Curiosity is the instinct that prompts that endless questioning by children which the tired parent or teacher too often dismisses lightly. Examine a child's questions. They are about everything, from ants to stars, from digestion to volcanoes, and from steam to glaciers. They are the little feelers through which the child is

struggling to gain a kinship to his world. This inquiring disposition can practically be stayed by forbidding the child ever to ask a question in class, or, by directing the questions, they can be made the basis for developing the true scientific spirit and method of work.

Other instincts. There is also the collecting and hoarding instinct, which may turn to postage stamps, through which a world of geography may be learned, or to shells, or nests, or cocoons, through which the child may enter into most intimate converse with nature, and, if the teacher is wise, it may even be extended to the collecting of ideas or facts about a given subject in history, civics, composition, or art; the instinct of emulation, through which one child is stimulated to his very best effort by the fact that he is being outdone by another child; and the gregarious instinct, which is the basis upon which the ideas and ideals of social order may be constructed.

All these are the crude, raw materials, which, together with their modifiability, are, if properly handled, the greatest asset which education has. To study the ways in which these native materials express themselves, and the ways in which they grow into permanent modes of behavior, is to study the very essence of both human nature and education.

4. How the child learns

The principles underlying conscious behavior, the getting of ideas, the formation of habits, the control of attention, are factors with which intelligent teaching must reckon. How does the child explore, or shall we say construct, the world he is in? We have discussed his native equipment above, and have seen how nature has provided motivating forces which push him out to explore the world about him and lead him to try to control it. Leaving aside that kind of

conduct which is purely reflex or instinctive, and so largely unavoidable for the child, what are some of the principles which operate to direct his conscious behavior?

The function of the senses. The contact which the child has with the objective world is through his senses of sight, hearing, smell, touch, and taste. Some knowledge of these would seem to be our first step in a study of the principles underlying conscious behavior. All the ideas we have are the direct or indirect result of our sense experience. Excellent evidence of this is seen in the nature of sense experience itself. If we hear a sound, or view a strange object, we immediately change the position of the body, to the end that we may more fully drink in the sight or sound if it is pleasant, or shut it out if it is unpleasant. In other words, no sensation is complete without some bodily movement as a response. This seems to mean that the reason for sensation is that we may adjust ourselves properly to the new object or situation, that is, that we may get a meaning for it.

A child's ideas, information, and therefore knowledge of things social, æsthetic, intellectual, moral, economic, and physical increase in proportion to the number and character of the sensations he feels and to the number of responses he makes to these stimuli. For education this suggests the importance of concrete as opposed to verbal training, of doing as opposed to mere remembering, of organization in terms of social relationships which are natural, of government in terms of leadership. It means that sense training must be a fact, as broadly applied in school management and instruction as it is in the child's own free life at home or on the street.

Principles of habit formation. Getting ideas, or information, or meaning, is but one side of education. There is yet the other side, which has to do with the development of skill or the formation of habits. Habit is the line of least

resistance in conduct, and our concern in education is to see that right habits are formed and that wrong habits are prevented. How, then, are right habits formed? If stated in simple terms there are three principles we need to follow.

First, get clearly in mind the full nature of the performance that is to be reduced to habit.

Second, go through the performance repeatedly, with closest attention to every detail.

Third, never permit an exception to the mode of action decided upon.

As James says, we can thus make our nervous systems our enemy or our ally. Habits are bound to be formed on the playground, in respect to methods of study, neatness, politeness, language, and recitation, and it is for the teacher first of all to get a clear notion of the habits she wishes to establish, and then to stick persistently to the application of these three principles till the performance has become as mechanical as if it were purely instinctive. An important reward for this persistence is the freeing of consciousness from many simple duties, and the guarantee that these duties will be performed promptly, accurately, and in the right place.

5. The problem of health

New interest in health questions. Physical development is another angle from which we must view the child as a factor in our task of management. City health departments are growing, health statistics are accumulating in gymnasiums and laboratories, diseases and preventive measures are being studied as never before, children are being taught physiology and hygiene, laws are being enacted for the control of contagious diseases, and the problems of health and their influence in education are being studied in every school of education. Yet step into almost any school and we find evidences of malnutrition, adenoids,

diseased tonsils, defective hearing and vision, lack of nervous control, and we read that scarcely one third of our American school children are free from physical defects which are prejudicial to health.

Health problems and school work. Surely this makes a difference in the problems of school management and in self-defense, if for no other reason, the teacher should fortify herself against this extra burden. The child who has to open his mouth and thrust his chin forward in order to breathe has too often been scolded for lack of attention, when in fact he was using practically all his energy in getting his breath.

When we recall that on the average two of every three children in the room are thus handicapped, we are inclined to say that a large part of the teacher's responsibility in management turns upon matters of health.

Prominent symptoms of most of these ailments can be detected by any intelligent layman who will take the trouble to look for them, and with no great amount of reading teachers may be able not only to solve more intelligently many knotty management problems, but they may, by a little intelligent and sympathetic direction of children and parents, be able to save hundreds from suffering and disease. Such a service should be looked upon by teachers not only as a privilege but as one of their sternest obligations.[1] It is children we are to manage, and not merely textbooks, report cards, time schedules, fire drills, and such other material details of school work.

6. *Individual differences*

No two children alike. There is yet another angle from which the child must be understood — that is from the

[1] A book of value to teachers in this connection is *The Hygiene of the School Child*, by Dr. L. M. Terman.

standpoint of his unlikeness to other children, or from the standpoint of his own individuality. We are accustomed to speak in terms of averages — the average score attained in the test, the average number promoted, the boy of average intelligence or size — as if the aim of the school were to turn the children out each as nearly as possible like the others. We are often satisfied if the child is up to the average in deportment, application, and studies, forgetting that no two children are alike.

In color of eyes, height, complexion and length of arms, there are wide differences among children of the same age. In exactly the same way children differ in respect to mental ability. The range from idiocy to genius is the possible range of intelligence. If a few thousand children were selected at random and competently measured for intelligence, it is probable that a very few would be marked as idiots, and imbeciles; that a few would rank as geniuses, and that every possible grade of intelligence between these extremes would be represented. Human nature is just this variable, and while so wide a variety of intelligence would probably not be found in a single classroom, yet if we refer to a single trait of intelligence, such as the ability to spell or the ability to sing, we should find that there is a wide difference between the poorest and the best, and that the members of the class were very much unlike in the exact nature of their responses in these tests.[1]

Significance of differences for the school. In grading and promoting children, in making lesson assignments, in appointing pupils for special duties, in seating the pupils, in developing incentives for work, in administering punishment, in supervision of games, in dramatizing stories, in making class excursions, this fact of individual differences must enter as a determining factor.

[1] The significance of all these differences is brought out more fully in later chapters.

This is not a matter to be deplored; it is rather to be prized as the guarantee of society's capacity to progress. Just as it has been the great biological fact in the evolution of the human race, it has also been the great social fact. If we were all alike, no one would discover a new way to do things. It is our unlikeness, our variability, that needs to be treasured. So instead of trying to bury it in the schoolroom, by preparing every task for that mysterious average pupil, let us stimulate these differences so that, by supplementing one another in school, they will enrich school life, just as variation, biological and social, has enriched human society.

7. *Chapter summary*

In this brief sketch of the nature and extent of the problem which the child presents, it has been the purpose to emphasize the fact that it is human nature that management has to deal with, and that regarding this human nature there is a well-defined body of knowledge — biological, psychological, and physiological — upon which rests any rational interpretation of the true import of the child as the first factor and the sole object in all school management.

QUESTIONS FOR DISCUSSION

1. Enumerate the large factors to be dealt with in the management of a school.
2. What is meant by native equipment of the child?
3. Describe a concrete case of instinctive behavior which you have observed. Connect it with the appropriate instinct, and explain what seemed to you to have been its real value or significance to the child.
4. Describe similar activities belonging to other instincts and explain any suggestions they might offer to the one directing the child's education.
5. Compare the period of human infancy in length with that of several other animals with which you are familiar.
6. How does the human infant compare with the young of other animals in respect to helplessness at various ages?
7. In what sense is the period of infancy a positive factor in a child's education?

8. In managing children, what value is there in knowing how they make use of their senses in getting knowledge?
9. How would you go about the formation of a new habit?
10. In what sense is a teacher responsible for knowing the symptoms of the common diseases of children?
11. What is meant by individual differences among children?
12. What significance will these differences have in the management of children?

PROBLEMS FOR STUDY

1. Suppose, in a class of thirty pupils, abilities to do the work of the grade range from barely passing almost to the point of granting a double promotion. Discuss the problems to be faced by the teacher:
   a. In assigning a new lesson.
   b. In arranging for group projects.
   c. In telling a story.
   d. In supervision of study.
   e. In developing class morale or group spirit.
2. Make a careful study of the objectionable social traits shown by the pupils of the class. Give specific cases, and frequency with which each has been observed:
   a. Matters of politeness.
   b. Matters of correct dress.
   c. Matters of fair play.
   d. Moral issues.
   e. Failure to coöperate.
3. Prepare a careful prescription for remedying such defects. What habits or attitudes are to be removed or changed? What new habits or attitudes are to be formed? Finally, where, in the course of the day's work, may the teacher find good opportunity to attack the problem?

REFERENCES FOR ADDITIONAL READING

Dewey, John. *Psychology and Social Practice.* University of Chicago Press, 1901.

Fiske, John. *The Meaning of Infancy.* Boston, Houghton Mifflin Co., 1909.

Strayer, Geo. D. and Norsworthy, N. *How to Teach,* chap. II. New York, The Macmillan Co., 1917.

Terman, L. M. *The Hygiene of the School Child.* Boston, Houghton Mifflin Co., 1914.

Thorndike, E. S. *Education,* chap. v. New York, The Macmillan Co., 1912.

Thorndike, E. S. *Individuality.* Boston, Houghton Mifflin Co., 1911.

CHAPTER IV

THE ENVIRONMENT AND TEACHER AS FACTORS

Outline of Chapter

1. Environment: Our point of view — The materials to work with — Directing the process — The real test of efficient management — Illustrating educative value of environmental factors — School management a rational process.
2. The teacher: New professional demands — The teacher's relationships — Professional relationships — Relationships with parents and community.
3. Summary of Part I: Questions — Problems — References.

In the preceding chapter we enumerated three factors as having to do with school management. The first of these was the child; the second was the environment; and the third was the teacher. The facts regarding the first of these were set forth above, and we shall attempt here to sketch out the field covered by the other two, hoping to show something of the nature and extent of the knowledge of which the teacher must possess herself if she is to deal intelligently with these two factors in her problem.

1. Environment

Our point of view. It is better to think of the environmental factors from the standpoint of the part they play in directing the child's education, rather than from that of their own formal or physical make-up. In thinking of desks from the standpoint of their perfection as pieces of furniture, it is easy to overlook the importance of the height of the seat from the floor, or of the adjustability of the seat, and to think rather of the general form, stability, and appearance. Similarly, in marching children into and out of the building it is often easier to think of the procedure in terms of its military precision than to think of it in terms of its contribution to the social and physical training of the

children. The most formal scheme of promotion is the best looking on paper, and the easiest to administer, but it is also of least educational service. Our starting-point, then, should be the process, rather than the machinery by which that process is determined.

The materials to work with. In addition to the factor of child nature, above discussed, the teacher must deal with the physical equipment and the plans of operation by means of which this child nature is to be changed.

Over many of these latter materials the teacher will have but little control. The building, the furniture and equipment, the playgrounds, and generally the curriculum are all there, ready prepared by her superiors and predecessors.

There are other aspects of the situation, however, in respect to which the teacher is not so helpless. She may not be able to determine the color and texture of window shades, but she can determine whether the shades render service. She may have to use unsuitable textbooks, but these she can edit and supplement in numerous ways, while the dust-covered equipment of whatever sort can be made to serve some purpose, so that what was evidence of neglect and waste may be made to look clean and orderly.

All these features are means and instruments in the hands of the teacher, and will be effective only as the teacher develops skill in bringing their influence to bear upon the growing child. A dirty and disorderly room and playground are sure to be reflected in the dress, manners, and speech of the children, and in a lack of loyalty to an institution in these respects so much below the standard of their own homes. On the other hand, by systematically connecting the work of instruction with these things, it is not only possible to enhance their appearance and increase their usefulness, but to develop within the children a sense of ownership and pride

in the school which is sure to spread to the community at large and ultimately to react favorably upon the school.

Directing the process. It is in terms of child nature, and with the use of such physical surroundings and equipment as may have been provided, that the teacher is to work out her plan of action. First of all, let us insist that all action be *planned* action; second, that plans, as far as possible, shall be worked out before the school year opens, and go into effect the very first day; and third, that all plans shall be frequently checked up in terms of their *educational service,* and not in terms of the ease with which they work.

In making plans the first step is to get clearly in mind what is to be accomplished, and the length of time in which it is to be done. This means that the course of study and the textbooks must be checked up against each other, and rough monthly plans of the work outlined. These rough plans will furnish the basis for making the daily or weekly lesson plans for teaching, and will tend to keep the work of the year well balanced. Then there are the daily time schedule; the basis of grading and promotion; the plan of seating the children; the movement of the class into and out of the building; the handling of wraps and supplies — all these represent problems of organization, a full grasp of which every teacher must have. The modes of procedure in these matters will represent the main structure of the school.

The real test of efficient management. But the real process of management is more complex than this would seem to make it. The main plans of operation, though more or less fixed in character, must yet be sufficiently flexible to meet the needs of child nature, which we have shown above to be extremely variable. Meeting these needs successfully, making these finer adjustments to individual cases, is the real test of efficient management. The control of attention,

the development of right motives for work, handling the child with defective vision or hearing — the nervous, the mischievous, the dull, the bright, the morally degenerate, the half-fed, the ill, as well as the normal child — cannot be done by rule of thumb. For each of these cases specific plans must be made which will sometimes test the patience and inventiveness of the teacher, as well as the elasticity of the regular routine procedure.

Illustrating educative value of environmental factors. To emphasize the teaching value of these factors, let us set down a partial list of these environmental items over which the teacher must exercise control, and see how such items may be utilized, just as textbooks and other curricular materials are used in giving instruction. As suggested above, we may properly think of plans of procedure along with such physical features as desks, window shades, bookshelves, and supplies.

For instance:

1. Plan of entering and leaving the building. Aim: not mere suppression of noise and disorder, but self-control, poise, and proper standards of social propriety.
2. Plan for care of wraps. Aim: to save time, in part, but especially to establish habits and attitudes affecting the proper use and care of clothing as these habits and attitudes affect health, taste in dress, and notions of neatness and order in the room.
3. Care of window shades. Aim: to protect eyes against improper light, and especially to train children to pay attention to such matters.
4. Plans for collecting and distributing pupils' work and supplies. Aim: not only to save time, but to train children to organize and to act as parts of an organization.
5. Daily time schedule. Aim: not only proper distribution of effort to different tasks, but also training in definite and orderly use of time, in bringing tasks to completion on time, and in judging the character of a task by estimating how long it will take to complete it.

6. Plans for use of school library. Aim: to stimulate an attitude of inquiry and to help the child to gain actual knowledge from books; to develop intellectual independence; and to gain familiarity with library etiquette.

This list could be extended or made more detailed, but these are typical aspects of the environment which sets limits to the child's actions in school. Each of these is more than a restraining force, however; when properly used it is an actual teaching exercise with a definite aim. This means that there is a real problem in method here for the teacher, just as there is in any other instructional activity.

It is not meant here to suggest how the teacher should handle these problems. She may prefer to have the children march quietly into and out of the building, or she may prefer to have them enter in their own way. She may prefer this or that method of seating her pupils. She may have monitors for caring for the window shades and pupils' wraps. The point here is that these features of the school mechanism have large educational possibilities, and a good teacher will treat them not as bars to restrain free action, but as orderly methods of guiding and stimulating freedom of action and assumption of responsibility.

School management a rational process. Thus the process of management is to be from start to finish a rational process, involving the making of plans and their execution. These plans become more complex, more flexible, more in terms of individual natures, as we pass from their coarser and external to their finer and internal features, from the gross structure of the school to the management of individual children. To make the operation of these plans rational, the meaning and aim of education, and the nature of child life and its modes of learning must alike be kept in mind as the plans are evolved. In their coarser features they may be designed outside the school, but in their final application

they cannot be made away from the cases they are to fit. A study of these plans, and of the physical features of the school environment which enter into their working, will be the purpose of a later section of the book.

2. The teacher

New professional demands. Finally, we are to deal with those facts which pertain to the teacher herself. These we are putting last in order because we wish to emphasize the scientific as opposed to the personal approach to the study of school management, and to show the character of the task before outlining the qualifications of the one who is to execute it.

The school of to-day is by no means the simple institution it used to be when teacher and school were considered synonymous terms. Then a little book learning coupled with a pleasing appearance constituted the necessary equipment for teaching, but to-day the task has broadened and become technical and the demand is for men and women who have been scientifically trained along these lines.

The teacher's relationships. The teacher is but a part of a complex institution, and to know well how to perform her function is not only to know her own immediate task, but to know it in all its implications, physical, social, and professional. To be able to work harmoniously with her school trustees, her superintendent, her supervisor, her principal, her fellow teachers, and to be able to make the school a factor in community life, demands a broad grasp of the larger professional and social problems of public education.

Through the board of education the people delegate authority to those who manage the schools. Its members stand as the representatives of the people and are responsible, not for running the schools, but for employing competent

officers and teachers for that purpose. While the teacher is ultimately responsible to this board she must remember that the board is concerned only with large questions of school policy, and not with matters of teaching and management.

Professional relationships. The teacher's most important relationships are with her immediate co-workers in the school — the superintendent, the supervisor, the principal, and her fellow teachers. Her own duties as a member of this group will be a constant study, since upon her full co-operation here depends her own success and that of the entire enterprise. These relationships will be fully examined in later chapters. In them, it must be pointed out, lie some of the most difficult problems the teacher will have to face. Directing one's own energy in full sympathy and accord with that of the entire faculty calls for a clear understanding of the respective functions of each member in addition to a high degree of self-control and self-effacement.

Relationships with parents and community. Finally, the teacher is responsible to her patrons. She is a servant of the community. Her relationship to parents will be more or less intimate accordingly as she is in a rural, village, or city school. In any case she must formulate, or assist in formulating, a school policy, and that in terms of community needs. To do this she must know the people and their social and workaday interests, and become in fact a real member of the community.

It would seem to require an unusual person, of unusual training, to establish proper relationships and to bear all the responsibilities thus far suggested, and so it would. An unusual person in character and personality, an unusual person in professional equipment and ability to grow, an unusual person as to insight and leadership, an unusual person in physique. In part IV we shall consider the teacher from these points of view.

3. Summary of Part I

In the above chapters we have attempted to outline the problem of school management, and to show in a brief way the fundamental bases upon which any scientific handling of children must rest. We have tried to see just where the problem of management lies, and to develop a point of view from which the teacher may approach the actual practical task in the schoolroom.

In doing this we have seen that the teacher, who is society's agent, will have to deal with two large sets of facts. First, facts about original child nature; second, facts about all the forces which combine in the school to give direction to the changes which are to be wrought in that nature, as the child grows to manhood and to citizenship. Over the first of these sets of facts the teacher has no control, but over the second she has a very wide control. This last set of facts we have arbitrarily, and for purposes of study, divided into two groups. The physical and formal features of the institution we have grouped under the head of "the management process," in order to accentuate the function of such features, rather than their form; while those which have to do with the direction and control of the process were to be dealt with under the title of "teacher." We are to think of school management, then, by thinking of children; of the process of their development; and of the person who directs that process.

We have seen how good management involves an understanding of child nature and of the future claims which society places upon that nature; how the school can be managed to these ends; and when the aim of the school with respect to each is clear. This involved a study of the biological, psychological, and physical factors in child nature on the one hand, and of sociological and institutional facts on the other.

This study of individuality brought to light the fundamental relation between theory and practice in school work, from which we saw not only the relation of aim to management, and of correct method to the accomplishment of a given aim, but also the responsibility of the teacher with respect to the *why* of all her work.

Finally, the nature and scope of the teacher's task from the standpoint of the physical factors she is to deal with, the plant and equipment, the formal organization of children and materials, and her relationship to her community and to her fellow school officers, was examined. From this we saw that the task of managing a school is far more complex to-day than it was when social and

industrial life were simpler, and that the teacher's task is one which involves technical knowledge and professional skill, as well as a good personality.

In the chapters which follow we shall examine in greater detail the problems affecting the child (part II), the process of management (part III), and the teacher (part IV), which have been outlined in the above discussion.

QUESTIONS FOR DISCUSSION

1. What advantage is there in thinking of a blackboard, a plan of promotion, or a daily time schedule in terms of their use in the school?
2. How would you classify the materials with which the teacher must work in managing a school?
3. What is a correct basis for measuring the efficiency of a management plan? What is the advantage of making out as complete plans as possible before the time they are to go into effect?
4. Why do most plans have to be slightly elastic? Illustrate.
5. For what kind of problems is it impossible to have fixed plans?
6. Why is it economical to develop set ways of carrying on certain features of schoolroom procedure? What plans of this type have you used? What educational return did you expect from them?
7. Is there relatively less emphasis placed upon the teacher's personality than formerly? Why?
8. In what sense is the teacher a state officer?
9. Explain the teacher's relationship to the various other school officers, and show why, in a large school, success is dependent upon the way in which the work of individual teachers is coördinated.
10. What should be the relation of the teacher to the social life of the community?

PROBLEMS FOR STUDY

1. Draw up a list of questions you might wish to submit to your supervisor on each of the following subjects:
   a. Getting a clear general aim for management work.
   b. Getting a clear aim for the task of doing away with use of slang and incorrect speech.
   c. Utilizing extracurricular activities for social training.
   d. Bringing the plan of seating pupils to bear upon the solution of problems of order and coöperative study.
2. Outline a plan for handling the wraps in a class, and explain how you would hope to get educational returns on its use.

REFERENCES FOR ADDITIONAL READING

A Mother's Letter to a Schoolmaster. New York, Alfred Knopf, 1923.

Chancellor, W. E. *Our Schools; Their Administration and Supervision,* chaps. III, IV, and VI. Boston, D. C. Heath Co., 1904.

Cubberley, E. P. *Changing Conceptions of Education,* pt. III. Boston, Houghton Mifflin Co., 1909.

Eliot, Chas. W. *The Concrete and Practical in Modern Education.* Boston, Houghton Mifflin Co., 1913.

Kilpatrick, Wm. H. *Education for a Changing Civilization.* New York, The Macmillan Co., 1926.

PART II
THE PUPIL AS THE OBJECT

CHAPTER V

MEMBERSHIP AND ATTENDANCE

Outline of Chapter

1. The child's contact with the school: The responsive character of childhood — Developing new companions — The teacher as leader.
2. The attendance problem in the large: The State's interest in attendance — Aspects of the problem.
3. Causes and consequences of such irregularities: Causes classified — What poor attendance means.
4. The first step in meeting the issue, analysis: Adequate records and reports necessary — Cases demand individual treatment.
5. The second step, what to do: Make school life attractive — Coercion the last resort — The attendance department.
6. Summary — Questions — Problems — References.

The purpose of this part. The child is the fundamental point about which all our study of management must finally center. He is the sole object for whom all plans are to be made, and only in so far as any plan or device facilitates his development can it be considered effective.

We have set forth above the ends which are to be sought in the child's training, showed how those ends must function in management, and indicated the materials which must be dealt with in attaining those ends.

The interests of the child are therefore the beginning and end of every plan, or program, or basic principle, which enters into our study of this subject. How to help the child to comprehend the meaning of the institution of which he is to become a part, how to bring him into congenial relationship with his teacher and with the other members of the school, how to secure his regular attendance, to manage him when he is disobedient and disorderly, to reform him when he is unsocial, to provide him with appropriate incentives for right behavior and study, and to know when we have secured the desired results, will be our next group of problems.

1. The child's contact with the school

Responsive character of childhood. The child is naturally responsive to kindly treatment. His membership in the home has given him six years of most intimate and personal experience with his parents, who have thus far directed him. Now the teacher is to stand *in loco parentis*, and it will be her task to assume this responsibility in reality. This means that she shall seek to establish between the child and herself, and between the different children, those same intimate personal relationships they have thus far known only in the home. If this is really undertaken the response of the child will be immediate, and the development of a real sense of membership will go forward rapidly.

With such relationships once established the school can then guarantee to the child the widest freedom for personal development, and at the same time teach him the larger meaning of his place in a social world. There will be room for his play, for his imagination, for his reasoning, for his judgment, for his will, all, to find expression in terms of the claims put upon them by his fellows.

Developing new companions. Previous to his entering school the child has had but few companions outside the home. With this limited experience in forming new companionships, he now faces the necessity and opportunity of becoming a member of a new and larger circle.

Heretofore we have largely ignored this as a problem in managing children. The child was allowed to shift for himself. If he found friends easily he soon felt himself a member of the new circle; if he was timid and quiet he went along suffering until, in a sense, he was swallowed up by the group.

Just here we find the teacher's responsibility as a manager. "Becoming a member" in a classroom has much in common with becoming a member of a church, of a business corporation, of a lodge, of a golf club, of a sewing circle, of a political

party, or of a profession. We are greatly in need of scientific studies of how the child develops this sense of membership, and of the handicaps suffered by college students and by adults in facing social situations of this character.[1]

The least a teacher could do would be to study her own pupils, and to take a hand in getting the timid ones adjusted and the bolder ones subdued. For this the very first day of school is important. Get acquainted with mother and child as they enter; take special pains with those who are new in the community. Remember that no two children are alike.

The teacher as leader. In this program the teacher is the leader. It is her task to see to it that not one but every pupil shall live up to these possibilities. All shall work and play freely, all shall initiate ideas and actions. For the teacher the problem of establishing this membership, then, is not to be left to chance. It is a problem of executive training and deserves a far more careful study than has so far been given to it, or than can be devoted to it in the brief space available for it here.

2. The attendance problem in the large

The State's interest in attendance. If such membership is to be established, then one of the first problems is that of attendance. Society is attempting to provide for all its children the kind of introduction to school life which we have just described. This is the State's gift to its children, and from the standpoint of a trained citizenship, it is highly desirable that every child should improve this opportunity to the full limits of its possibilities by regular and punctual attendance.

State legislatures have enacted compulsory-attendance laws in order to protect children from the ignorance and

[1] See Wellman, Beth. "The School Child's Choice of Companions"; in *Journal of Educational Research*, vol. XIV, pp. 126–32. (Sept., 1926.)

selfishness of such parents as fail to appreciate the value of education, yet in the face of these laws our school records show that there are yet many difficulties to be overcome before perfect attendance can be realized.

Aspects of the problem. In the school the problem presents itself in three different forms. First, there is the child who is rarely or never in school; second, the child whose attendance is irregular; and third, the child who is frequently late to school. The first of these is supposed to be cared for by the compulsory-attendance and child-labor laws of the State. Yet the attendance records in almost any city afford ample evidence that these laws are even yet to a large degree ineffective.[1] The second and third types constitute the teacher's problem in management. Who these absentees are, why they are irregular, the difficulties they create in the school, and how they can be most effectively dealt with, are questions which the teacher and principal must attempt to answer.

3. Causes and consequences of such irregularities

Causes classified. There are almost as many causes of these evils as there are types of human nature. There are just causes, such as illness, severe storms, serious trouble in the home, etc., which are legitimate reasons for absence or tardiness. But of unjust causes there is no end. Read the excuses which children bring to school: "Had to help mother," "Father wanted me to run an errand," "Didn't feel well," "Had to stay with baby," "Wanted to stay out a day and rest." These are typical.

The cause may, however, lie within the school itself: a

[1] Out of 57,830 cases of absence in St. Louis, in 1913–14, taking this city as an illustration, there were 2383 which were due to truancy by 728 different children. In this same year itwas found that 90.6 per cent of the truants were retarded in their work. (*Annual Report of the Superintendent of Schools.*)

cross, unsympathetic teacher, a formal curriculum, a stiff and unnatural school atmosphere, a gloomy, uncomfortable room, are often causes which will not be mentioned in the child's written excuses, and yet are true — and one is tempted to say justifiable — causes of such irregularities.

What poor attendance means. School, like time and tide, waits for no child. Whether he is out for a good or a bad reason his opportunity is slipping by, and when he returns, after a day or a week out of class he will find his work harder, his own interest materially weakened, and the temptation to quit and go to work more pressing than ever. These are not mere opinions any longer, as numerous studies of retardation go to show.[1] In a recent study of the annual reports from one hundred and thirty-four city school systems, the writer found that practically one fifth of the superintendents of those cities had recommended some revision in the methods of handling the various problems of attendance.[2]

There is yet another consequence which must not be minimized, and that is that such irregularity causes the child to lose respect for the school and for learning, while developing in him habits of slovenliness where there should be habits of punctuality. From the standpoint of sound manhood, to say nothing of the claims of business and social life later, no pains should be spared to establish the proper habits, and to fix in the minds of children the importance of promptness and regularity in all school activities. Attendance is one vital point at which this type of training should begin.

4. The first step in meeting the issue, analysis

Adequate records and reports necessary. In every man-

[1] See Ayers, L. P. "Irregular Attendance — A Cause of Retardation," in *Psychological Clinic*, March, 1909.

[2] *American School Board Journal*, June, 1914.

agement problem a full understanding of the facts and what they mean to all concerned — the child, the school, the State — is the first step to be taken. The State has provided the legal machinery for handling the problem, and it is the business of the schools to make that machinery effective. This is being done with some degree of success in the larger cities, where a complicated system of records and reports provides the necessary information for the officers in charge, but in the smaller towns and in rural communities, where a single attendance officer must cover a large territory, the work frequently is inefficient or entirely neglected, and thousands of children are out of school as a result.

Cases demand individual treatment. As has been suggested above, the apparent cause of absence or tardiness is not always the real one. To get at the real cause the teacher must know her pupils at home as well as at school. Often the home conditions explain the case fully. Many parents are thoughtless or indifferent, and the complete lack of any system in his home life makes it practically impossible for the child to apply system to his school work. Under such circumstances the child deserves pity rather than reprimand.

But the home is not always the source of the trouble. There is the careless pupil, the physically defective, and also the truant. These cases must be studied fully. To punish hastily is often to aggravate rather than to remove the cause. Of one thing the teacher may feel reasonably sure, and that is that no two cases are alike. This means that each case must be studied individually if it is to be intelligently dealt with.

Once the case has been carefully diagnosed some sort of remedy may be proposed. Whatever method is decided upon it must be in terms of the needs of the particular child in question.

5. The second step, what to do

Make school life attractive. If the first step is to analyze the situation, the second must be to determine what action to take. Prevention is to be our first line of attack. We cannot assume that the issue will never arise, and consequently we must try to anticipate it. This may be done in two ways, one positive and the other negative. We may make school so attractive that the child will want to come, or we may resort to coercion.

The school may be made attractive in two ways. First by seeing to it that the principles developed in the above chapters are fully applied every day, and with respect to every pupil who enters school. Tardiness is often overcome entirely by having opening exercises that are worth while.

The school may also be made attractive by the use of rewards, such as prizes, holidays, and the like. These are for the most part little short of bribes, and will usually react badly, for the reason that they imply that "being good" will purchase some sort of relief from the unpleasantness of school work.[1] The use of an honor roll, the keeping of individual records of the pupils by themselves, wholesome rivalry between classes, a five-minute warning bell, and other similar devices may often be used to good effect, but a poor school will sooner or later offset the effect of the best devices, while a good school will make them unnecessary.

Coercion the last resort. When all efforts of this kind have failed, then coercion is the only recourse, and no time should be lost in applying such measures as will get results. Here is where the teacher becomes a diagnostician. She must make a full study of each case, looking into the pupil's home life, his physical condition, his likes and dislikes in school work, records of his past conduct and scholarship, the types of his associates in school and out; then, once all

[1] For a full discussion of this see Chapter VIII.

the facts are clear, she must attack the causes of the trouble. Nor should she be satisfied until every cause has been removed. In such little investigations the teacher will often get the most pointed sorts of criticism of her own work. These she should treasure and not scorn.

In some cases the teacher will be able to remove the cause with little or no friction, but in others she will not. Then some kind of force must be used. Here the possibilities of error are also great. Scolding, threats, keeping in after hours, demerits, extra study, and all similar devices will only add to the child's dislike of school, and should seldom or never be used. Corporal punishment, or loss of privileges may be resorted to or the case may go at once to the attendance officer.

The attendance department. This takes the case out of the teacher's hands, but suggests a certain other duty which she has in connection with matters of attendance, viz., that of keeping accurate and full records of every case, and of reporting all cases promptly and in good form to the proper officer. The beginning of these duties lies in taking care that an adequate excuse is brought from home by the child each time he is absent or tardy. By a little tact and persistence, the standard for excuses can be brought up to where it belongs. The next step is recording the essential facts in each case for future reference and as a basis for a report to the attendance officer. In the large city the whole question of attendance is handled by a separate department, carefully organized for that purpose. A study of the organization and working of such a department is recommended to the teacher who wishes a larger perspective for this important aspect of her work.[1]

[1] A brief and clear description of the system in use in New York City in 1915 has been published. See "The Bureau of Attendance and Child Welfare of the New York City Public School System," by Paul Klapper, in *Educational Review*, November, 1915. See also: *Bureau of Compulsory Education*, Report for 1926 by Board of Education, Philadelphia, Pennsylvania, June 30, 1926.

By these and similar means the teacher may hope to put an end to the various kinds of leakage that result from poor attendance. In doing so she will guarantee to the child protection against the greed or ignorance of others and against his own lack of foresight, and also will provide him with a right point of view and a wholesome set of habits with respect to the matter of regularity and promptness in school work. Furthermore, if due precaution is taken to keep the principles of regularity and punctuality clearly before the child as principles, and fully applied in other things, as well as attendance, there is no doubt that the child will have one acquisition that is as useful out of school as it is in school.

6. Chapter summary

In this chapter we have outlined the problems to be treated in Part II, and have discussed the questions of membership and attendance.

We have seen that the teacher's first problem is to help the child to establish the right sort of contacts with the school, which if accomplished will give him an understanding of his duties and privileges as a member of a new social body. This is primarily a problem of socialization and executive training.

To manage this well involves first of all the question of regular and punctual attendance. Attendance is not merely a personal matter with the child alone, it is of immense importance to the school and to the State as well.

In most schools there are three general types of cases that have to be dealt with. These are the truant, the irregular pupil, and the pupil who is habitually behind time. Innumerable causes account for these cases, some reasonable and some unreasonable, which the teacher must understand before she can hope to control. In general her diagnosis of a given case will require a study of the child's relationships with the school and with his work and play, as well as for an understanding of his health and of the home influences involved. Her success will depend upon her ability to perfect these adjustments, or perhaps finally upon resort to legal authority exercised by the attendance department.

QUESTIONS FOR DISCUSSION

1. If regular and punctual attendance is a fair measure of the efficiency of your teaching, what figures would you use in finding your own grade of efficiency and stating it in percentage form?
2. State the essential features of the compulsory-attendance law in your State (see State School Law) and explain:
   a. What officers are necessary to administer the law?
   b. What records and reports are necessary to make the law effective?
   c. Just how would you proceed in placing one of your pupils in the hands of that law?
3. About what percentage of the total enrollment can we expect to be in average daily attendance? See city and State school reports.
4. Make a list of the main facts you would expect to bring to light in diagnosing a case of truancy. What would you do if you found the blame to rest entirely with the parents?
5. Why is a careful study of each case necessary?
6. In terms of the compulsory attendance law of your State, what constitutes a legitimate excuse for absence?
7. What is the influence of irregular attendance on the rate of promotion? Look up half a dozen prominent studies of retardation, or make a study of the past attendance records of an eighth-grade class in your school.
8. In what way does the child who is frequently out of school for a day or two at a time impose an injustice on his class? Make a careful study of a few cases in your own room to see just the nature and amount of trouble that each case causes.
9. What special devices do you know for overcoming tardiness?
10. What objection is there to the granting of a half holiday to the class at the end of the month, if attendance has been perfect?

PROBLEMS FOR STUDY

1. Make as complete a list as you can of the institutions of which a boy may now or later have reason to become a member. Make separate lists for age-groups, as follows:
   a. Age 6 to 12 years.
   b. Age 12 to 18 years.
   c. Age 18 years and upwards.

   Analyze the meaning and responsibility of membership in each case in terms of knowledge, skill, and personal habits or qualities required, and then bring together in groups the names of pupils that are alike.
2. Having prepared a similar list and analysis for girls, consider where the child may expect to learn how to behave as a good member of any of the institutions in question. To what extent could the school hope to

lay the foundations for these future needs, and where in the school would the instruction be given?

REFERENCES FOR ADDITIONAL READING

Bagley, W. C. *Classroom Management*, chap. v. New York, The Macmillan Co., 1908.

Cooper, Richard W. and Hermann. *Negro School Attendance in Delaware.* Newark, Del., University of Delaware Press, 1923.

Davis, Sheldon E. *The Work of the Teacher*, chap. x. New York, The Macmillan Co., 1921.

Emmons, Frederick Earle. *City School Attendance Service.* Bureau of Publications, Teachers College, Columbia University, New York City, 1926.

Horn, John Louis. *The American Elementary School*, chap. VII. New York, The Century Co., 1923.

Kellogg, A. M. *School Management*, chap. VI. New York, E. L. Kellogg Co., 1884.

Reavis, Geo. H. *Factors Controlling Attendance in Rural Schools.* Teachers College, Columbia University, 1920.

CHAPTER VI

ORDER AND DISCIPLINE

Outline of Chapter

1. What we mean by discipline: Two types of discipline — Meaning of natural discipline.
2. The teacher's problem: The application, not the formulation of principles — The child's need of information.
3. Bad discipline and its causes: When a school is disorderly — Studying and removing the causes — Bad order due to lack of understanding — Bad order due to forgetfulness — Bad order due to mischievous or malicious motives — Looking for the underlying causes
4. The influence of bad discipline: Positive and negative influence — Immediate and remote bearings of conduct — All behavior enters into environment.
5. Conditions essential to good order: Public opinion and authority the bases of control — The teacher to help form public opinion — Knowledge the basis of leadership — System saves time and friction — Energy and persistence are contagious — Fair play and good cheer — Self-control a large element — Other elements of leadership.
6. Summary — Questions — Problems — References.

1. What we mean by discipline

Two types of discipline. In a well-governed school problems of order and discipline[1] do not exist apart from problems of directing the regular work and play of school life. In a badly governed school the opposite is true. In the one case the question of discipline is only an incident, a phase of the total school procedure. In the other discipline is by necessity an end in itself, since there the behavior does not facilitate study, recitation, and orderly play, and may even seriously disturb them. So when we speak of discipline we have in mind the mode of behavior, the manner of living and working together in the school. When these tend to bring teacher and pupils into pleasant and profitable relationships, and so to produce a natural and comfortable so-

[1] The practical schemes that are being used by city superintendents for rating their teachers place the item "efficiency in discipline" as of very first importance. (See *The Fourteenth Year Book of the National Society for the Study of Education*, part II, p. 19.)

cial atmosphere, we call it a well-disciplined school. When they do not we say the school lacks in discipline.

Meaning of natural discipline. Problems of order and discipline are by no means confined to the school. In fact their real meaning may be best understood if we first examine typical modes of behavior in other institutions. If we look for the problem of discipline in such places as the street car, the church, the hotel, the bank, or the street, we find in each place particular modes of behavior which are adapted to the comfort and convenience of those present. Yet in no two of these places is the behavior the same, and in no one of them is the behavior well adapted to school purposes. So, when we say that the school must be like life we do not mean that its discipline must be like the discipline in the shop or home, or at a picnic. We mean, rather, that school discipline is to be just as intimately adapted to school life as is the discipline at church to religious life, or as is the discipline on the street car to the convenience and comfort of the passengers.

2. The teacher's problem

The application, not the formulation, of principles. The teacher's problem, then, is one of establishing and maintaining standards of conduct.[1] These standards cannot be copied from standards in vogue outside the school, but must be determined by the nature of school life itself.

This does not mean, however, that school discipline has nothing in common with discipline elsewhere. Common ideals and standards of politeness and coöperation obtain everywhere the same. Just as people who are entering a car step aside until passengers desiring to leave the car have

[1] Investigations have shown that weak discipline is more often the cause of teachers' failures than is any other one thing. See Buellesfield, "Causes of Failures among Teachers," in *Educational Administration and Supervision*, vol. I, p. 439 (September, 1915).

got off, so, in school, the same principle of politeness demands that a child shall not break into a line or into a game when by so doing he will discommode other pupils. The difference is not in the principle of conduct, but in the occasions which call the principle into action. Thus the teacher's task is not one of developing a new set of moral or social principles of behavior. Hers is the much more practical task of seeing that the accepted standards of society are not obscured by the new set of conditions which the child meets with in the school, and that they are properly applied in the behavior best adapted to life in the school.

The child's need for information. When the child enters school for the first time he is quite as much a stranger to the appropriate modes of behavior there as is the country youth to the signals of a traffic officer in a large city. And just as the boy from the country has to learn the law and the etiquette of city streets, so the new pupil must learn the law and the etiquette of the schoolroom. Consequently disciplining a school involves first of all, a clear conception of the best modes of behavior, that is, a clear aim, on the part of the teacher; and secondly, the establishment of those modes in school practice through careful instruction. This makes discipline a positive constructive program, with development and not suppression as the end. If such a program were carried out with the entering class and maintained from grade to grade, problems of restoring order would seldom appear apart from other aspects of instruction. Since this is often not the case the teacher is confronted not only with the task of establishing the right standards, but, first of all, with that of breaking down wrong standards.

3. Bad discipline and its causes

When a school is disorderly. We have said that a school is disorderly when the accepted modes of behavior are not

suited to the chief aims of the school. If people began to enter the train before the passengers had alighted there would be much loss of time. If automobile drivers had not adopted the rule of "keeping to the right" there would be confusion, to say the least. Ladies remove their hats at the theater, the clerk waits on the customers in the order of their coming, and people enter the church quietly because these are the accepted "best ways" for all concerned.

Similarly in school there is confusion, loss of time, and little accomplished when the accepted ways of doing things are not ways which are best suited to the end sought. If all talk at once no one can hear; if some play while others work there is little satisfaction for either group. If children move at widely different rates of speed in entering or leaving the room there is friction and discomfort; if a pupil does not respond promptly when called upon to recite there is loss of time for all.

Yet the order at the station, on the street, and in the store, is not always perfect. The call of the conductor to "Let the passengers off, please"; the quiet voice of the usher saying, "Please remove your hat"; the clerk's "Pardon, sir, I believe this gentleman is ahead of you," suggest to us that some one has failed to conform to the accepted best style of conduct. Some people fail to conform because they do not know the accepted procedure, others because they temporarily do not think, and others in order to get an advantage for themselves. Similarly in school there is the same need for a firm, quiet command to set the ignorant, the forgetful, and the mischievous or mean pupil straight in line with the *best* behavior.

Studying and removing the causes. The school that is a failure because of disorder is one where the many instead of the few ignore the best ways of doing things, where the common principles of politeness have given place to indifference

and insolence, and where much of the conduct is designed to defeat the chief aims of the school. The net result in extreme cases is anarchy, the occasional expression of mob violence, and general social disintegration.

If such infringements of good order in the school are to be corrected, the cause must be studied and removed. The teacher cannot long remain a mere police officer in her room. Why then does the question of correction arise, why are the accepted modes of behavior in the classroom disturbed by the ignorant, the forgetful, or the malicious child? It is with the *motive* that any effective remedy must deal. A child should not be punished for not conforming to a procedure which he does not understand. A brief analysis of a few typical causes of bad order, therefore, should at least furnish the teacher with a more critical point of view for meeting such cases.

Bad order due to lack of understanding. The child who is entering school for the first time has much more to learn outside of books than inside. He has a whole set of new adjustments to make, some physical, some intellectual, but mainly social. He is facing life in a new and strange institution, and has before him the large task not only of understanding the institution but of becoming a part of it. He must learn to play a part, to coöperate with a group of strangers in a new enterprise. If with such children the teacher fails to make very clear the plan of work from hour to hour there will be hesitating, with continuous miscarriage of the program. However innocent this disorder may be as to motive, it is none the less dangerous to the development of right habits of procedure.

There are certain other cases which come under this head that the teacher must learn to recognize. Children come from different types of homes, where different standards of politeness and refinement prevail. It is therefore much more

difficult for some children to conduct themselves acceptably in the school than it is for others. The teacher must not mistake crudity which is due to lack of home training, for crudity which is due to indifference or malice.

Bad order due to forgetfulness. The second group of cases are those which are due to inattention and forgetfulness. How frequently a child excuses himself simply by saying, "I forgot." And so the child forgets the lesson assignment; forgets to bring his book to school; forgets his place in the line when fire drill is called; forgets about crowding, about leaving his books in order, keeping his written work neat, cleaning his shoes, washing his hands, or being courteous to other pupils.

Such disorderliness is serious because it is so deep seated. It is a case of disorderly mind, of slovenly habits of thought as well as of conduct. True, there may be behind this habitual inattention and forgetfulness certain physical or mental defects which tend to distract the child's attention, and these are among the sources to which the teacher must look for the full explanation of the causes. But habits of inattention and forgetfulness may also be due to external causes. If there are no established ways of doing things in the school, ways which the teacher regularly insists upon, then it is easy to forget any exception to this. If assignments are not made with care, and if pupils are not regularly held up to those assignments, inattention is sure to result. If the teacher excuses a second or third offense there is little to induce the child to remember.

Bad order due to mischievous or malicious motives. The third group of cases are those which the child himself recognizes as disorderly behavior. They range all the way from innocent pranks to studied malicious acts designed to destroy good order. Bubbling childhood must not be ignored. There must be room in the school for laughter and fun as

well as for serious study. Yet there is a point beyond which jokes and pranks cannot wisely be permitted to go.

It should be remembered that a large percentage of the little annoying mischievous acts is committed merely for fun, and that the fun is not in the act itself but rather in displaying the act before other pupils. John purposely mispronounces a word in reading, or attaches a paper to Tom's coat, merely to cause a laugh. Throwing spitballs at the blackboard would not amuse James were it not for the fact that other children are looking on and marveling at his daring. The bent pin, the sly nudge, the hidden hat, the chalk down a neighbor's back are further familiar illustrations.

These acts, while by no means harmless, do not present the serious problem which arises in cases of dishonesty, theft, immorality, and fighting. Of course home training, or a lack of it, influences in these as well as in other directions. If the moral standards of the home are low the children from that home present a special problem for that very reason. But the causes are not all in home training, or in human nature, or in mental or physical defects; they are often in the associations formed by children. One bad pupil in a school may lead several good ones into very wrong ways. A cigarette smoker is likely to have imitators even among children from good homes if careful supervision is not exercised. The gang, or the clique, or the club, is in many schools the most dangerous source of trouble. Out of fraternity the boy or girl is kindly and genteel; in it, snobbery often becomes a fashion which spreads like an infection to good and bad alike. Alone, the boy does not think of smoking, or gambling, or robbery; in the gang, he goes with the crowd. It is these associations, these social forces or fashions, which constitute the real cause.

Looking for the underlying causes. In all cases of bad

conduct, then, we must look below the surface for the real motive. It may be deep down in human nature, it may be in present mental or physical conditions, it may be in home training or street training; but it may also be within the school itself. If so, look to the general ideals of conduct and of work which are being enforced and see whether those ideals are steadily, or only spasmodically insisted upon. Look to the hygienic conditions of the room, and to the facilities for work. Look to the social life, to the relations between pupils. Is John mischievous simply because he sits near James; have swearing, or smoking, or bullying, or coarse play, jokes, and laughter become fashionable because of a certain pupil; is there any sort of group organization which is tending to isolate certain children from others? Or again, is the teacher a model of gentility and good breeding, is she industrious and businesslike in her work, and is she thoroughly human with it all? These are the possible sources to which we must look for the explanation of bad order in the school. Over a few of these causes the teacher may have no very direct control, but most of them she can reasonably hope to remove once they are fully understood.

4. The influence of bad discipline

Positive and negative influence. The influences of bad discipline are both positive and negative. Positive, in that the individual child and the class as a whole develop habits and ideals of behavior which are detrimental in life; negative, in that the fundamental aims of the school are being defeated. Likewise the influence may be only temporary or it may be permanent; it may be direct or indirect.

If the immediate value of good behavior is in a happy, well-directed schoolroom where efficient work is being accomplished, its ultimate value is in sound moral, social, and

intellectual habits and ideals. Consequently any disorder whatsoever is a force in opposition to these ends. If a child is permitted to use coarse language, to leave his desk and books in disorder, to walk noisily through the room, to wear his hat in the house, it is true that the immediate effect appears to be of but slight consequence, and such acts are often permitted to pass unnoticed or with only a slight reminder. The ultimate effect, however, is a group of habits and ideals of slovenliness where there should be habits and ideals of refinement.

Immediate and remote bearings of conduct. In such cases it is not the immediate but the remote bearing of the conduct that counts. The school may suffer slightly, but it will not immediately go to pieces under such strain. Similarly, the child may seem a bit less refined but not specially unruly. But if such acts are allowed to pass unnoticed their accumulated effect will ultimately not only rob the child of the opportunity to develop habits of refinement but fasten upon him habits of the opposite sort. Similarly, by its influence on others it will coarsen the behavior in the room and in time lower the accepted standard of good order.

In other cases of a more serious nature the same principles hold true, only that the influence is increased in intensity. An act which involves genuine disobedience, gross neglect, or base immorality, is immediately destructive of the sense of decency and justice both to the child and to the group, and if allowed to pass unnoticed by the teacher such conduct will quickly undermine the order of the school.

All behavior enters into environment. All behavior, good or bad, by one or by many pupils, constitutes a part of the environment, and operates as one of the educational forces under which the child is placed. As such its influence is good or bad in some degree. It is not neutral. There is

no waiting between acts; growth is going on in terms of whatever forces there are present.

Again, every act in the room which is recognized by the teacher as in the least unruly or out of line with her ideas of good order consumes a certain amount of her energy which might otherwise go into her teaching. A constant drain of this sort will in time result in nervousness which rapidly lowers the teacher's power to control either by example or by precept. The same influence will be felt by the pupils, particularly by those who are sensitive to any sort of noise or friction. Disorder therefore thrives on what it feeds upon. The same, however, is just as true of orderliness and system.

5. Conditions essential to good order

Public opinion and authority the bases of control. As on the train, in the store, or on the street, so in the school there are two forces which operate to maintain good discipline. These forces are public opinion and legal authority. Just as the burglar is not restrained by public opinion from imposing upon society, and so makes it necessary to have peace officers who can apply force, so in the school there is the occasional pupil who for one reason or another will not conform to the accepted usages in the school without coercion. Likewise as the mere presence of a policeman restrains many from unsocial acts on the street, so the mere presence of a strong teacher who habitually deals promptly and vigorously with offenders in the school, constitutes an important restraining force.

The teacher to help form public opinion. For the teacher to control public opinion in the school, then, is of the utmost importance. If John is told in the presence of the class that he is not to repeat a certain act, he will almost certainly look about to see whether the other pupils are with him or against

him. If he feels that the teacher's reprimand is in disfavor, he is very sure to cause further trouble. If, on the other hand, he detects no sympathy in the glances which other pupils give him he is very likely to yield promptly to the teacher's wish.

How to get and maintain control over public opinion in the school thus becomes the teacher's first large problem in establishing conditions for good discipline. This can be done only through the exercise of leadership. A boss who controls a school by a constant display of authority will win only by suppressing the children's freedom in a very large sense. If in the end such a teacher does not appear to have failed it will be only in appearance, for under such oppression children do not learn to think for themselves and to control and direct their own energies among their fellows. While authority is in no sense to be surrendered by the teacher, neither is it to be used for mere display, or because to lead is often more troublesome than to drive.

Knowledge the basis of leadership. No one can lead who does not know the way. The teacher who does not know more than she must teach, who does not frequently do some fresh thinking about her subjects, cannot long hide these limitations from children. And while children respect, even reverence wisdom, they are quick to scoff at a lack of it, and no teacher can quickly regain a child's confidence on this point once it has been lost. This applies also to dress, manners, speech, and general attitude.

System saves time and friction. A place for everything and everything in its place is a maxim which applies not only to furniture, supplies, window shades, and wraps, but to children, to recitations, to study time, to illustrations in teaching, and to ideas as well. The teacher who begins the day without a definite plan of her work will frequently have to retrace her steps. The geography class is called, and only

after the recitation is started does the teacher discover that a certain important map has not been hung; that the specimens of grain, stone, or oil from the fields, quarries, or wells of the region being studied are still in the cabinet. An assignment in history is made by saying, "To-morrow we will take the lesson on the settlement at Jamestown," but no suggestion is made that the children look at the maps, and no reference is made to a delightful little book full of stories about John Smith. Consequently the next day when these things are brought in by the teacher they are but half appreciated, because the children were not properly prepared for them. Time is lost by trying to do for the children things they would have done for themselves had their work been properly systematized.

Similarly in moving the children into and out of the room, in getting supplies distributed, in the fire drill, where the procedure from the beginning should be systematized and reduced to habit, there is certain to be confusion and all its evil consequences where and when such system fails to do its work.

Energy and persistence are contagious. If the teacher knows her work thoroughly, has it well systematized, and then pursues it with energy and persistence, the example will surely be followed by her pupils. Chancellor Jordan has said that "the world steps aside to let a man pass who knows where he is going." It is this type of man who puts his knowledge to account in the achievement of a purpose, and does not quit until that purpose is achieved. Such a teacher is irresistible as a leader of children, who are quick to imitate behavior which they admire. Such a teacher does not leave tasks half done, nor does she permit pupils to do so. If a theme is handed in which is not neat, then the paper must be done over. Nor does it stop there, for all written work is watched for the same thing, and the idea of

neatness is pushed further to include arrangement of books and papers, clean shoes, hands, face, nails, and teeth, clean language, and clean sport.

The teacher who makes no mean no, and yes mean yes, is the teacher who is obeyed without question or argument. When snowballing has been forbidden on the street the matter is not left to care for itself. While the wise teacher will not make herself a spy she will take care to know that such acts have ceased, and where they do not she will deal with them promptly until they have been completely stopped. If she tells a boy that he must have his hair combed she will follow the case morning after morning until the habit is fixed. The very certainty that the teacher means what she says, that she will do exactly what she says she will do, and do it in no half-hearted way, will perhaps be feared by a few who can only be conquered by fear, but it will be respected by all, and imitated by most. Such disintegrating forces as laziness, slothfulness, irregularity, cannot thrive in such an atmosphere.

Fair play and good cheer. Pessimism and discontent cannot thrive in an atmosphere of fair play and good cheer. In every schoolroom justice, seasoned with mercy, of course, must be dealt out to all alike. There must be no favorites. The most troublesome child is likely to be a strong admirer of the principle of the "square deal," and all children will support the teacher in her insistence upon the application of that principle on the playground, in the recitation, in her own assignments of work, and in her administration of punishment.

But justice, or fair play, is cold and harsh unless applied in a spirit of good cheer. The successful banker is one who can refuse a loan to his customer and yet send him away feeling that he has been well treated. Anger is no part of justice, and in almost any case will be resented. In school

government it is often necessary to be firm, but firmness is always strengthened and never weakened by kindness. A cheerful face and cheerful words dispel suspicion and pessimism and stimulate coöperation. The clouded, tear-stained face of a pupil entering to relate a grievance is often brightened by a cheerful remark from his teacher, who, anticipating the child's errand, deliberately sidetracks it until the child is in a mood not to exaggerate the facts.

Self-control a large element. It is almost self-evident that one who cannot control himself cannot control others. Children as well as adults respect the man of poise, because he is not one to be moved by mere sentiment to do foolish things. The teacher who can so control herself under vexing circumstances that she does not act hastily, or show anger, or speak harshly, is the teacher to trust, if only for the reason that the children need such an example before them to imitate.

Other elements of leadership. There are other elements of leadership which enter in a lesser way, such as a good voice, proper dress, manners, and speech, and good health, and which will help to determine the extent to which the teacher will be able to direct the public opinion within her school, and so to maintain high standards of order and discipline through the power of leadership.

If the teacher will apply the principles here set forth to the physical conditions of her room and equipment, to her relations with pupils, to her instruction, and to her own preparation for her work, she will have provided the most favorable conditions possible for good order. This is attacking the problem in a constructive way. Pupils living in such an atmosphere will have a program so full and so well organized that there will be little time left for irregularities of any sort.

In spite of such a program, however, the exceptional case will arise, over which public opinion and good teaching

will have no influence. Such cases can be met only by the firm hand of authority. If obedience is not willing, it must be enforced. How force is to be used, and its relation to the fundamental task of instruction will be problems for another chapter.

6. Chapter summary

To summarize, then, let us keep in mind that school discipline has to do with modes of behavior in the school, in the same sense that applies on the street, or elsewhere in the world outside the school; that such problems can never be separated from the regular work of instruction; and that they are, for the teacher, an end in themselves only when behavior constitutes rebellion against the school. Let us remember that the teacher's problem hinges on establishing the commonly-accepted moral and social principles of conduct in the behavior of her pupils individually and as a group, keeping in mind that bad discipline is detrimental in the school in precisely the same sense that it is detrimental on the street, and that it can be corrected only by removing its cause; that the cause may be inherent in the child's mental or physical make-up, in his present physical or mental conditions, in his previous training or the lack of it, or in the way in which the school is conducted.

Let us remember that the teacher must study each case with a view to removing its cause; or anticipate cases by setting up conditions which will tend to prevent their appearance. And further, that such conditions can only be established through the influence of leadership and authority. Leadership involves a full knowledge of what and how to teach, the use of systematic methods of work, the application of energy, persistence, justice, and good cheer; and the use of self-control, good manners, and correct dress, voice, and language. Authority must be used sparingly and with dignity, and never for mere display, or because it is easier than leadership. Finally, we must bear in mind that true leadership will always be backed up by public opinion, which is one of the most potent forces or control in the school, as it is everywhere else in life.

QUESTIONS FOR DISCUSSION

1. Explain the meaning of discipline in the light of the statement that in a well-governed school problems of order and discipline do not

exist apart from problems of directing the regular work and play of the school.

2. When is a school said to be badly disciplined? Mention several cases of bad behavior in the school, and several cases of a similar sort which might occur on the street or at a public assembly. What common elements do you find in the two sets of cases?
3. To what extent and in what specific ways do the established principles of good behavior apply in schoolroom behavior?
4. To what extent is the problem for a foreign child, or a child entering school for the first time, a problem of learning lessons from books? To what extent is it a problem of adjusting himself to a new and strange set of physical and social conditions? Is the teacher's large problem in such cases that of teaching book lessons, or is it mainly that of establishing modes of behavior that are well adapted to the handling of book lessons? What are some of the things a child would have to learn during his first week in school?
5. What is the importance of establishing right modes of behavior from the start? Mention certain parts of school procedure which should be reduced to routine.
6. Outline the causes of bad discipline, and suggest typical cases under each type. Why is "I didn't think" a poor excuse for a child to offer as an explanation of wrong behavior? How can children be taught to remember the right thing to do?
7. Why is it necessary to study each individual case of disorderly conduct separately? What would you look for as the possible explanation of a disturbance due to too much whispering?
8. Explain, by typical cases, what is meant by positive and negative influence of bad conduct.
9. In what ways does popular opinion operate in the control of the school? Should the teacher definitely undertake to formulate the public opinion of her class with respect to such problems as (1) the degree of quiet best suited to the work, (2) the extent to which whispering is permissible, (3) fair play on the playground, (4) hard work, (5) good manners, (6) right use of library, (7) proper reading matter?
10. Where will authority be effective in formulating public opinion? Under what circumstances would any use of force cause the teacher to lose control of public opinion?
11. Name the elements of leadership which a teacher must show possession of if she hopes to direct public opinion in her room. Outline several cases, to show how these elements play a part in control.

PROBLEMS FOR STUDY

1. Make as complete a list as you can of the particular things a child will have to learn about being an active member of a school group, in a

school where pupils enjoy large freedom of movement and where they are in a manner self-governing, though where the actual authority and machinery of control are retained by the teacher.

2. What is the nature of the problems faced by a teacher who has two pupils like the following:
   a. Very talkative; a born and determined leader who does not wait for group decision, but tries to have the say in the class and out; nervous in manner, always moving; does not mean to be impolite, but often is; not bad, but wears out everyone except himself.
   b. Extremely quiet; never speaks except when spoken to, even timid; does his work well as assigned, but never adds an original touch; follows well, but with no enthusiasm; prefers to be alone.
3. Describe a well-disciplined school.
   a. Keep in mind the ideas of self-control, self-confidence, and individual independence and responsibility.
   b. Show where and how training in self-restraint, in leadership, and in followership are taking place.
   c. Suggest types of information that are being acquired, habits and attitudes that are being formed, and skills that are being developed.

REFERENCES FOR ADDITIONAL READING

Avent, Joseph. *Beginning Teaching*, chap. xx to xxiv. Published by the author, University of Tennessee, Knoxville, Tennessee, 1926.

Bagley, W. C. *School Discipline.* New York, The Macmillan Co., 1914.

Johnson, Newlon, & Pickell. *Junior-Senior High School Instruction.* New York, Charles Scribner's Sons, 1923.

Mirick, George A. *Progressive Education*, chap. iv. Boston, Houghton Mifflin Co., 1923.

Morehouse, Francis M. *Discipline of the School.* Boston, D. C. Heath & Co., 1914.

Nutt, Hubert Wilbur. *The Supervision of Instruction.* Boston, Houghton Mifflin Co., 1920.

Perry, A. C., Jr. *Discipline as a School Problem.* Boston, Houghton Mifflin Co., 1915.

Peters, Chas. C. *Foundations of Educational Sociology.* New York, The Macmillan Co., 1924.

Smith, W. R. *Educational Sociology*, chap. xiii, "The Socialization of Discipline." Boston, Houghton Mifflin Co., 1917.

CHAPTER VII

SCHOOL PUNISHMENTS

Outline of Chapter

1. The reason for punishment: The group more important than the individual.
2. Society's attitude toward punishments: The old idea — The new idea.
3. The meaning and end of punishment: Punishment means pain — Must not express anger — Immediate and remote aims — Fundamental aims in punishment — Retribution not an aim.
4. Characteristics of effective punishments: Certainty the chief deterrent — It must be painful — It must be understood.
5. The theory of natural punishments: Spencer's theory — Not always effective in practice — The practical limitations of this theory.
6. Kinds of punishments: Corporal punishments — Reproofs and rebukes — Other punishments — Suspensions and expulsions.
7. The administration of punishments: Need for punishment a teaching situation — Like other instruction punishment is individualistic — Time and place for punishment — The teacher's responsibility.
8. Summary — Questions — Problems — References.

1. The reason for punishment

The group more important than the individual. However skillful the teacher may be in directing the public opinion in her school, however cleverly she may lead her pupils in the establishment of right modes of behavior toward one another, toward their work, and toward their play, there will always be the exceptional child, who, for one reason or another, will not conform to the accepted fashions of his little society. For such children there must always exist the rule of force. The school must be protected against the misconduct of any of its members who are inclined to ignore the rights and wishes of others, for society never sacrifices the group for the individual.

Penalties, therefore, must constitute a part of the machinery for maintaining good discipline. As such, though, they exist for use only in these exceptional cases, and are never for display.

2. Society's attitude toward punishment

The old idea. Throughout the Middle Ages and in our own colonial days and later, the idea of restraint was dominant. It was assumed that the child was by nature bad, and that punishment was necessary to bring him to humility and repentance. In the school the ferrule, the cowskin, the rawhide, and the rod were held in high respect.

Everywhere, even in college, corporal punishments were common. We read of extreme corporal punishments administered in public, of pupils being made to flog one another, to stand on sharp pegs, to sit on nothing, to stoop and hold a nail or peg in the floor; of boxing ears, thumping on the head, shutting children in dark rooms, forcing them to hold their arms in a horizontal position; and of the use of the dunce cap as common practice. Along with this went a lengthy list of rules with specified punishments for each infraction.

The new idea. This old idea of suppression has given place to a conception almost the opposite. We now think of the child as neither bad nor good by nature, but as having capacity for either. This removes the emphasis from suppression and places it upon guidance and instruction, and replaces the admonition of "don't" with that of "do."

This change in attitude has not ruled out the idea of punishment, but it has changed its meaning. The old idea of breaking the child's will was wholly negative and psychologically unsound. The end is not to destroy; it is to construct. Repression, therefore, is not the end, and only in extreme cases is severe repression even a part of the process of correcting a pupil. Instead we look to the task of redirecting — of shifting the child's energy from wrong to right attitudes. This is a task of instruction.

Even with this change in viewpoint, however, we have

found no perfect panacea for stubborn unsocial behavior that resents the usual methods of guidance. We have first to stop a force before we can reverse its direction. Where stopping the unsocial conduct is not accomplished by suggestion it may require force. It is at this point that punishment, somewhat like a stone wall in our path, must appear. Just how our new conception of punishment defines this stone wall is of importance.

3. The meaning and end of punishment

Punishment means pain. Punishment means pain and loss inflicted upon offenders, and unless there is pain, physical or mental, there is no punishment. This is obvious enough, but it is sometimes overlooked by teachers who mistake their own feeling of relief at having "disposed of the case" for pain to the offender. A cuff on the ear, a sharp rebuke, an order to do so-and-so next time, consumes the teacher's ire and leaves her feeling easier, while it may only provoke a knowing smile from the children, which pleases the offender. Such procedure not only is not punishment, but it is a severe blow to good order and tends to destroy the dignity of the teacher's position.

Must not express anger. Punishment must not mean merely an outlet for the teacher's anger. Historically punishment has been supposed to represent the claims of justice, and never the claims of some overwrought emotion on the part of the one who administers it. Punishment is to uphold the just claims of the school and not the personal rights of the teacher. The teacher is always in danger of interpreting an offense in terms of a personal insult to herself, whereupon punishment becomes a matter of "getting even" with the pupil. No offense should ever be so interpreted. It may be so intended by the pupil, but the teacher will add much to her power by making it clear that

the offense is against the school and against the teacher's position, and not at all against her personally. That will make the teacher's attitude that of protector of the rights of others and not of her own. Calmness and reasonableness then, instead of anger, should characterize her attitude, and the administering of punishment will mean pain and regret instead of personal resentment.

Immediate and remote aims. The immediate aim of punishment then is to maintain the dignity and rights of the school and of the teacher's position, and to inflict pain on the offender. It is *to reëstablish right relationships.* The remote aim is *to make those relationships more secure.* This latter purpose tends to broaden the possible service which school penalties may be expected to render.

Right relationships are not reëstablished until the offender is himself again a coöperating member of the group. This he cannot become until he is completely reformed, when he will again possess the confidence of his fellow pupils and of the teacher. Reform of the offender thus becomes one of the ultimate aims of all punishment.

Every time a pupil commits an offense in school, his little society suffers a break in the bonds which secure to it all its group privileges. Consequently, punishment becomes a step not only in reëstablishing those bonds, but in making them more secure against a similar danger in the future. Punishment is thus used as a means of publicly condemning wrong, and of warning others against similar offense.

Fundamental aims in punishment. There are thus set up three fundamental ends to be achieved through the administration of punishment:

1. To give expression to society's disapproval of wrong.
2. To deter others from committing like offense.
3. To reform the offender.

Retribution not an aim. This purposely omits retribu-

tion as an end of punishment, and definitely declares against such a purpose, and that for two reasons:

1. Society should not, any more than the individual, punish in order to "get even" with the wrongdoer. It is not "getting even," but self-protection that society wants. "Getting even" is a motive in fighting or quarreling, but society, the school, is not in the fighting or quarreling business.

2. Reform of the individual cannot be wrought by such means. Punishment must stimulate the offender to change his ways. If the school merely "hits back" the offender is left in a resentful instead of a regretful mood. And resentment is not the beginning of reform.

4. Characteristics of effective punishment

Certainty the chief deterrent. A good punishment is one that is certain to come when deserved, one that causes pain without serious or permanent injury, and one the meaning of which the child fully understands. It is not so much the severity as the certainty of punishment that deters children from doing wrong. It is obvious to every student of American politics that the greatest weakness of our municipal governments lies in the fact that punishment for wrongdoing is by no means certain. The same principle holds true in the school.

It is human nature to enjoy taking a risk. Every boy worth educating loves adventure. But when punishment is certain the element of risk or adventure is eliminated. There is no longer uncertainty or chance, and consequently no special appeal is made to this primitive instinct.

It must be painful. Second to the certainty of punishment is the discomfort it brings. To control the nature and amount of the pain is the important and difficult task. The punishment must be just if it is to effect reform. Pain may

be in the form of sorrow, remorse, or chagrin, or it may be purely physical. It will certainly be different with different individuals, and must be administered accordingly. Whether the pain shall be mental or physical or both is not the question here. There must be real hurt, hurt which is genuinely repulsive to the offender. How great the hurt should be will depend upon the nature of the offense; how it shall be produced will depend upon the temperament of the offender.

It must be understood. Finally, a punishment is only effective when the child understands fully what it is for and why he must accept it. That means that he must fully appreciate the nature and extent of his offense, and the relation of the punishment to the particular offense committed. That is, he must see that this suffering which he is to undergo is a reasonable, and as nearly as possible, a natural consequence of his deed. Or, to put it in psychological terms, he must form a mental association between the pain and the misdeed which provoked the pain.

5. The theory of natural punishment

Spencer's theory. Punishments may be thought of as natural and artificial. A natural punishment is one which comes unavoidably as a consequence of some act or neglect, while an artificial punishment is one which is arbitrarily assigned as a consequence. Herbert Spencer was the first great expositor of the theory of natural punishments. His argument was based upon the biological principle that the true function of pain is to put a check on activities that are harmful to the organism, while pleasure has the effect of causing the beneficial activities to be continued. In other words, whatever is painful is harmful, and whatever is pleasurable is beneficial. Carrying this biological principle over to the moral aspect of the activity, he would argue

that any conduct the total moral results of which are beneficial is good conduct, while any conduct the total moral results of which are not good would be bad conduct. Thus bad conduct would bring its own punishment in the form of pain, and good conduct would bring a reward in the form of pleasure.

Not always satisfactory in practice. Of the virtues of such punishments, Spencer declares that they are inevitable; that they are proportionate to the degree of offense; that they are constant, direct, and unhesitating; and that they hold throughout life. Under certain circumstances these are real virtues. Applied in the school, however, such punishments may occasionally be dangerous because the immediate effect is part of and not separable from more serious ultimate effects. If a child persists in annoying pupils near him he will fail to do his work and in time develop habits of dallying instead of studying. If he quarrels on his way home he may lose his friends and develop a disagreeable personality. If he cheats in games he may be left out of games and in time build up wrong moral standards that handicap him.

In such cases the immediate effects are temporary, though they may prove effective deterrents. If they do not deter, however, then the more ultimate, more harmful, and more enduring, but by the child unsuspected, effects ensue.

One further illustration will show the practical limitations of this theory. If a child persists in playing truant the natural result will be a poor education. This may some day be painful to the offender, but certainly not in the immediate present. Consequently it would not serve as a deterrent until too late to be of use. John Stuart Mill, in arguing for the endowment of schools, said: "Of their bodily wants and ailments, mankind is generally con-

scious; but the wants of the mind, the want of being wiser and better, is, in the far greater number of cases, unfelt!"[1] This fact makes a natural punishment in such cases ineffective, in fact dangerous, for the reason that the offender is soon to become an imposition upon society, and the sum total of suffering it may produce may be out of all proportion to the offense at the time it was committed.

Whatever we may think or like, however, the *law* of natural punishment does obtain. Wherever there is wrongdoing there is some kind of suffering. As a fundamental principle this may perhaps be held up to the children through concrete illustrations, and taught with some good effect upon their attitude toward wrong and toward penalties for wrongdoing.

Artificial penalties must be resorted to in certain cases, however, if desirable ends are to be met. These penalties are arbitrary, to be sure, but for that reason they are controllable, and may be made to fit cases where natural punishments are undesirable. That is, where natural laws are ineffective, they must be supplemented.

6. Kinds of punishment

Punishments have been enumerated and classified often and in various ways, and long explanations of how, when, and where they are to be applied have been given. Practically all agree that severe types of punishment should not be banished from the list of available penalties for misconduct in the elementary school.

This book is attempting to present a constructive program, to put emphasis upon instruction and leadership as opposed to coercion. Yet every practical schoolman knows that a severe shock of some sort is frequently necessary before certain children will accept the leadership of the

[1] Mill, J. S.: *Dissertations and Discussions*, vol. I, p. 54 ff.

teacher and enter upon a coöperative program with the school.

What kind of shock, or how to produce it, is after all not an easy question for the inexperienced teacher who is confronted with the practical task of punishing a child. How can she produce the results characteristic of effective punishments?

Corporal punishment. Bodily punishment will produce pain, and can be administered soon enough after the offense for the association between the misdeed and the pain to be established. It should be used only in extreme cases, after every milder method has failed to get results; only after the child has been made fully conscious of the meaning of his offense; and always in the presence of another school officer. It should not be applied in public, and under no circumstance should a child be shaken violently or struck about the head.

Corporal punishment is not only wise but necessary under certain conditions. A child whose home training has been coarse and brutal, and who has never had an opportunity to develop respect for anything except physical strength, may be practically incapacitated for understanding any other type of punishment than that which demonstrates the teacher's superior physical strength and her willingness to use it on offenders. Such a child is to be pitied, and though such punishment will be temporarily necessary to bring him within the reach of better influences, yet, as rapidly as possible it should be dispensed with, and he should be made to feel himself a member of a group which is bound together not by force but by the spirit of coöperation toward the common good.

Reproofs and rebukes. Many children will respond very readily to a sharp reminder that what they are doing is wrong. This does not mean that scolding, threatening,

and nagging are to be sanctioned. Such procedure always brings the teacher-pupil relationship into the realm of quarreling. The offense and the punishment then become personal matters which engender bad feeling on both sides, and stimulate argument on the part of the pupil instead of submission to the teacher's will. A sharp reproof, brief and to the point, without a threat of further punishment "if it happens again," will often restore the unruly child to a proper attitude. Reproof or rebuke must be in as few words as possible without being satirical or sarcastic. It must never admit of a reply, and must be fully backed up by action if necessary.

Other punishments. There are numerous other possible punishments available if used with proper discretion. Certain privileges may be taken away from children, such as acting as class monitor, and leading the games; detention after hours or at recess may be used, if care is exercised in distinguishing the punishment from school work, so that the child will have a feeling of dislike for the penalty and not for the school.

Suspension and expulsion. Suspension and expulsion must always be available as final modes of handling the confirmed cases which will not submit to other methods. They should not be trifled with, as by threatening expulsion, and should be used very rarely.

7. The administering of punishment

Need for punishment a teaching situation. As was pointed out in the chapter on order and discipline, managing children's conduct is a part of instruction. The object is to develop types of behavior which are best adapted to the place and to the purpose of the school. This may be accomplished, in most cases, by mere suggestion or by example. In some cases definite instruction is necessary; in

others requests that such instruction be applied. In a few cases it will be necessary to command observance of such instruction, and in a few coercion will be needed, and we meet with the question of administering that coercion.

The point to be emphasized here is that all these are cases for instruction. They are different in a few respects, but they are all teaching-situations. The result sought in all cases is regard for the rights of others, high moral ideals, and right habits of conduct. The unruly child may not like to develop the habits appropriate to school life, but when occasion demands the school must force him through the essential processes.

This point of view with respect to punishment should help to relieve its administration of some of its disagreeable features. Punishing a child should be looked upon as teaching the child, and the method of punishment should be studied in exactly the same sense as is the method of teaching arithmetic. The teacher who takes such an attitude views the whole procedure objectively. This is a matter of first importance, since it eliminates the strictly personal element and so prevents anger, or any other emotional state, from interfering with the process.

Like other instruction punishment is individualistic. Once punishment is accepted as a teaching problem its individualistic nature is more easily realized. In this, as in all instructional work, individual differences play a large part in determining the method to be pursued. All children should know how to use good English, but we know that exactly the same methods cannot be used in any two cases. Our methods always vary slightly to meet individual needs. Similarly, if two boys commit the same offense they must both be corrected, but the methods to be used will necessarily vary to meet the particular needs of each case.

This principle has a rather wide significance.

1. It means that however many rules of behavior the teacher may make, she cannot assign a given penalty for the infraction of any particular rule. Suppose a rule is made against truancy, and corporal punishment is assigned as the penalty for breaking it. Now suppose two boys break this rule, one because he is a confirmed truant, the other because he was coaxed and bribed into it. Corporal punishment must follow. We can imagine the following results. The confirmed truant suffers the punishment without a whimper, and actually in glee at the privilege of showing his grit. The other boy is humiliated to the extent of feeling that he has forever lost his honor and brought shame upon his home. Certainly no one would say that corporal punishment here has fulfilled the requirements for effective punishments.

2. Every case must be fully diagnosed before a penalty is enforced. It would be little short of crime to punish a child, such as truant number two above, with corporal punishment, while for a boy such as truant number one such treatment would be next to folly unless it could be made almost brutal in its nature. Temperament, mood, sex, age, size, physical and mental condition, motive — all represent types of individual differences which punishment cannot wisely ignore.

Time and place for punishment. Where and when punishment should be administered are likewise important questions. No child should be seriously punished in the presence of other children, and that for two reasons. First, for a sensitive child it is extremely degrading to be so humiliated in the presence of his fellows, and leaves him crushed rather than punished; or if he be of the brazen, dare-devil type, then it is just his chance to show off. In either case the real aim is defeated. Secondly, it arouses sympathy for the offender which he does not merit, ter-

rifies the younger and more timid pupils, and throws the whole room into a state of excitement, fear, pity, anger, and resentment. The many are thus made to suffer for the one.

As to the proper time for punishment, there can be no set rule other than to keep in mind that if the offense is to be associated with the pain of punishment the two must be as closely related in point of time as is possible. How closely this may be will depend upon the nature and extent of the penalty necessary. A penalty may often consist of two parts — anticipation and realization. For some children an afternoon's dread of a conference with the teacher after school is a more effective punishment than is the conference itself. In such a case punishment follows immediately after the offense, and continues till after the conference is concluded. For some other child, however, the afternoon would be spent in preparing plans to defeat the purpose of the conference, or in gleefully announcing to the boys that he is "in for it" to-night. In such a case the passing of time will certainly weaken the effect of the penalty.

The teacher's responsibility. One other caution should be added, and that is that every teacher should in the main rely on herself to do the punishing necessary in her own room. Sending children to the principal's office is too often a mere farce in school practice. A good principal will not permit his office to develop into a mere peace officer's job, and will not be slow in making it clear that teaching, discipline, and punishment all belong to the same program, and that the teacher cannot easily unload the disagreeable part of her work on his office. But even from the teacher's point of view very few cases should go out of her hands. To use this method often amounts to holding the principal's office over the children as a constant threat, and goes

far to destroy the prestige the teacher may establish in other lines.

Finally, the teacher should depend upon leadership as far as possible, and when punishment is necessary think of it as a suggestion that leadership is weak at some point. She should remember that punishment must be instructive as well as corrective, that all offenses are against the school and not against the teacher, that anger will destroy the teacher's power, belittle her office, and produce only resentment in the offender. She should also remember to be deliberate and fully self-possessed, to talk little, to act promptly where action is necessary, and never to promise something that she does not mean to carry out. Still further should she remember that an important measure of her success as a teacher is the extent to which the need for punishment in her room diminishes.

8. Chapter summary

In bringing together the chief points in this chapter we should keep in mind first of all that some occasion for punishment is almost certain to arise in every classroom, and that plans for dealing with such cases cannot be wisely neglected.

The old idea of punishment as repression has given place to the idea that punishment is a form of instruction. Punishment must mean pain to the offender, and must be administered, not as an expression of personal resentment on the part of the teacher, but as an expression of the entire school's disapproval of the wrong done. Its purpose is to help in the establishment of this conception of society's rights against wrongdoers, to deter others from similar acts, and to reform the offender. Its aim is never retribution. Neither teacher nor school can ever stoop to mere revenge. The theory of natural punishment is applicable only in part, and that as a general principle only.

Punishment is effective only when its certainty is guaranteed in advance, when it causes real pain and regret, and when it is fully understood. Corporal punishment, when used with discretion, has proven effective, while its complete abandonment has usually

resulted in weakened control. Reproof and rebuke, the loss of privilege, and, as a last resort, suspension and expulsion are useful means of curbing unsocial conduct.

Finally, punishment must be looked upon as a part of instruction. It must be administered in a like spirit, and with the same regard to individual differences among children, and when severe, never in the presence of other children. With rare exceptions each teacher should control her own class and administer the necessary punishments, never forgetting that the first step should always be a full and complete diagnosis of the case in hand.

QUESTIONS FOR DISCUSSION

1. Justify the statement that problems of punishment are merely problems of instruction. Why should a teacher never permit an offense to become personal?
2. Take a common school offense, such as quarreling, and show what relationships have been broken by it. When have these relationships been restored?
3. Explain and justify the three purposes of punishment, as set forth in this chapter. Why is retribution not a reasonable aim?
4. Explain Herbert Spencer's theory of natural punishments, and point out its strong and weak points for school use. Cite cases in which such punishments would be useful.
5. How would you characterize an effective punishment? What is meant by "the child must fully appreciate the meaning of the punishment"?
6. Under what circumstances, if ever, is corporal punishment justifiable? In what ways does it fulfill the requirements for an effective punishment? Point out its limitations.
7. Enumerate a list of punishments which you think could be used to good effect in school. Make a second list which you think of rather doubtful value, or to be used only under peculiar circumstances.
8. What has the question of individual differences to do with the administration of punishments? Why is it dangerous to make rules in school with definite penalties for infraction? Would you make rules without naming the penalties? Why should the penalty be administered as soon as possible after the offense? What is included in the diagnosis of an offense?
9. Describe or characterize a child to whom you would never administer corporal punishment. One whom you would not rebuke sharply. For what kind of child is mere suggestion adequate punishment? Reproof? Lowered deportment? When should suspension and expulsion be resorted to?
10. Of what kinds of privileges would you deprive children by way of

punishment? Why not assign tasks as punishment? Why should teachers rarely refer cases to the principal?

PROBLEMS FOR STUDY

1. After long preparation a group of pupils were to present a play and expected visitors. John, out of envy and jealousy, hid a part of the equipment for the play and enjoyed the embarrassment he had caused. Later the offender was located and brought to task. When confronted with the facts he at first denied it all, and scoffed at the thought of it. Write out a dialogue between yourself and John in which the case was settled (settled in any way you choose), and in which a punishment was decided upon. Show how you utilized the opportunity to give instruction in which punishment played a part.
2. Describe cases of punishment where each of the following was used as means of punishment, and explain whether such a method could be used to proper educational ends:
   a. Laughed at the child and tacitly encouraged other pupils to do the same.
   b. Scolded the pupil, calling him stupid and mean.
   c. Kept him an hour after school, and at recess time.
   d. Refused him a coveted place as leading character in a play, or as president of his class, or as captain of his team.
   e. Had a long talk with him explaining the offense, and impressing the child with how very bad he had been.
   f. Used corporal punishment.

REFERENCES FOR ADDITIONAL READING

Bagley, W. C. *Classroom Management*, chap. VIII. New York, The Macmillan Co., 1908.

Bennett, Henry Eastman. *School Efficiency*, chap. XXIV. Boston, Ginn & Co., 1917.

Dewey, John. *Schools of Tomorrow*, chap. VI. New York, E. P. Dutton & Co., 1915.

Perry, Arthur C. *Discipline as a School Problem*, chap. XXV. Boston Houghton Mifflin Co., 1915.

Spencer, Herbert. *Education.* New York, A. L. Burt Co.

Strayer, G. D., and Norsworthy, N. *How to Teach*, chap. XI. New York, The Macmillan Co., 1917.

White, E. E. *School Management*, pp. 190–217. New York, American Book Co., 1893.

Wilkinson, Wm. Albert. *Rural School Management*, chap. XI. Boston, Silver, Burdett Co., 1917.

See also references for Chapter VII, above.

CHAPTER VIII

INCENTIVES IN MANAGEMENT

Outline of Chapter

1. Meaning of the term: Bridging the gap — The disciplinary conception of study — Interest related to effort — The practical meaning of interest — Training the pupil in proper habits — The teacher's task.

2. What makes an incentive effective: Incentive a means, not an end — Appeal must be immediate — Incentives must be adapted to age — Appeal must be positive — Use negative incentives sparingly — Danger in competitive prizes.

3. Types of incentives: Incentives vary with age and individual nature — (*a*) Incentives more or less incident to the regular organization and management of the class: (1) grading, promotion, and class marks; (2) monitorial service; (3) holiday programs; (4) school exhibits — (*b*) Incentives incident to good teaching method: (1) devices as incentives; (2) types of devices which serve as incentives — (*c*) Incentives not essentially connected with the regular organization or management of the school: (1) prizes; (2) honor rolls; special privileges and immunities, class rank, and public commendation — (*d*) Incentives based upon acquired interests and ideals.

4. Incentives and some newer methods of teaching: Incentives and the socialized recitation — Incentives and project work.

5. Summary of Part II — Questions — Problems — References.

1. Meaning of the term

Bridging the gap. Every one knows that managing and teaching children are simple and pleasant tasks when the children are vitally interested in the essential aims of the school, but, as was pointed out in Chapter I, some of these ends may, for the child, seem extremely remote — remote in the sense that he feels no interest in them and sees no way in which they are likely to profit him in later years. This situation is to a certain extent unavoidable, unless this gap between the child's present and his adult future needs can somehow be bridged. To do this means simply to fill it in with something that has a present meaning and significance for the child.

The younger the child the more completely is he occupied with the immediate present. The world is all new to him, and wherever he goes there are fresh views to take of

3564

things at hand. It is largely by experience and training that we are able to look ahead in life, and the child is so busy getting experience that he feels little concern about the distant time when he may need this or that information or skill which the school proposes to give him so far in advance.

The disciplinary conception of study. These are facts which the past has largely ignored on the assumption that doing disagreeable tasks under compulsion is the best means of getting an education. This was not only the assumption of our Puritan educators; it is one which has fought stubbornly against every subsequent proposal to make school work interesting. Consequently, even after psychology had won the fight for "interest" in instruction, the ancient school traditions, backed up by theological prejudice favoring a stern suppression of every activity in any way productive of pleasure, prevented any attempt to remove the artificial barrier which centuries had erected between interest and so-called discipline. This battle has been won only recently for school practice, and the meaning of the term incentive will become clear for the teacher only when she understands the part which interest plays in education, and the real relation of interest to serious effort.

Interest related to effort. When a given lesson or school task is attractive to the child, and he works at it on his own initiative, we say he is interested in it, or that the subject is interesting to him; when the task is unattractive and tends to repel him we say the task is uninteresting to him, or that he is not interested in the subject. If we study the behavior of the child under these two sets of circumstances we will see that in the case where interest is present the child is attentive to the subject, that the more attractive the task the more concentrated his attention becomes and

the greater becomes his effort. In the case where interest is not present we see the child's attention constantly flitting from the task; he is easily distracted, and assumes the attitude of a careless spectator. Thus we are easily able to distinguish an interesting from an uninteresting lesson, or an interested from an uninterested pupil. And we are familiar with the difference between the amounts of work accomplished under the two sets of conditions.

The practical meaning of interest. Now why are some tasks interesting and others disagreeable? Interest is a comprehensive term which includes not only the personal emotional inclination of the child toward a lesson, but also the objective results which he foresees in the lesson and wants for himself. How to find in an uninteresting task something which the child recognizes as pertinent to his own needs is the question.

First, we have the child, always with a capacity for having an interest in things which really concern him; second, we have the school aim, the lesson to be learned. The child is or is not interested according as the lesson does or does not contain something which he recognizes as valuable to himself. If he is not interested it is because he feels no important connection between his own self and what the lesson offers. The explanation then, of why some tasks are interesting and others are not is to be sought, not in the nature of the child alone, nor in the nature of the task alone, but rather in the connection between the two — in the actual relation of what the child now knows and feels and can do to the new facts or skills we are asking him to obtain, to the new appreciation or mental processes we are asking him to experience.

Training the pupil in proper habits. Where this connection is close there is no problem of management. The child will study without direction. He is interested and attends

to his work because he sees where to begin. But where this connection is not close the child is not interested, and then the task of management is present.

Three possible lines of procedure are open to the teacher: First, she may leave the child alone, to study or not as he pleases; second, she may force him to study by holding punishment over him; third, she may undertake to manage him with respect to his difficulty. The last is her plain duty. To leave the child alone is to waste his time and to force him to adopt the trial-and-error method, from which he will soon turn away in disgust. If driven by fear of punishment he will learn to despise the subject, and in time the school. In either case he will miss his opportunity to develop right habits of work. This is only another way of saying that he is forced to develop wrong habits of work, by which the school defeats its own end.

The teacher's task. How to provide an incentive, how to fill this gap, how to find some facts or activities akin to what he now knows and wishes to do, is the question for the teacher.

2. What makes an incentive effective

Incentive a means, not an end. Incentives are only means, and must not be permitted to replace the ends which they are designed to serve. Young children admire bright colors, and will readily attend to the number lesson if permitted to use brilliantly colored objects to count with. The question is, do they attend to bright colors, or to number experience, in such a case? The end sought is facility in the use of numbers, the means or incentive is bright-colored objects to work with. Does the incentive really fill the gap, or only seem to fill it? Certainly it makes a vital appeal to very genuine instinctive interests in the child, and makes the numbers objective and concrete, which

means making them real to the child. According to our definition that is the way an incentive should function.

A close examination, however, shows that something has been overlooked. Are the colored balls and the number experience inseparable? Must the child get the one if he gets the other? At once we realize that it is possible for the child to make counting, adding, or subtracting, a mere incident in the jolly experience of rolling bright balls or piling up colored blocks. So, while playing with colored balls and blocks seems on the face of things to serve perfectly as an incentive for studying an abstract and uninteresting number lesson, we see that it is very easy for the means to be converted into an end, the real end being regarded by the child as a mere inconvenience incident to the pleasant game.

Other illustrations could be given: Mary studies very often, not so much to learn as to win a prize; James takes pains with his written lesson, not to improve his skill in writing and correct use of English, but to avoid the negative incentive which is to remain after school and do his work over. So, to be effective, an incentive must not be so attractive in itself as to dominate the situation to the exclusion of the more important fact of the relationship which it is designed to establish between the known and the unknown, between the child's present active self and his task. Neither should it be so uninteresting as to create a motive of fear or dread.

Appeal must be immediate. To be effective an incentive must make an immediate appeal. That means that it must appeal to some native instinctive interest, or be so intimately related to the child's present purpose that it tends to illuminate that purpose. An extended knowledge of psychology is not so necessary as are a few simple observations to show us what this means in practice. It is char-

acteristic of young children to take little thought of the morrow. They live in the present, and an ever and rapidly changing present. Their toys are attractive for only a short time at best. Their world is mainly a world of things, while the teacher's world is quite largely a world of ideas, laws, and relationships.

It is only because the teacher has had a long experience with things that she is now able to deal with principles. Consequently the incentive appropriate to early school life must be something concrete and striking from a sense standpoint, something which at once affects the child's narrow personal world almost in spite of him. The young child loves change above all things. His life is dominated by his instinctive liking for intensive stimuli of all kinds, for play, for building and destroying, and he is extremely inquisitive about strange and wonderful things and happenings.

Incentives must be adapted to age. Incentives which appeal to these instinctive tendencies without falling into the danger of replacing the real end sought will be appropriate for early childhood and for older children who are mentally retarded. With more advanced children these cruder and simpler likes do not fully disappear, but others develop. With the larger mental content of growing years comes also an increased power to see ahead and to see relationships which are not so intimate; also greater power to reason — all of which means ability and willingness to lay aside an immediate for a future good. Incentives may then be of a higher order, without being less intimately related to the child's immediate interests. That is, the appeal is now not only to the instinctive but also to the acquired interests. The number experience, at first had in connection with games and play, has itself become an interest to which we can appeal. Thus, as soon as the child has completed

the arithmetic work of grade four, he will be permitted to apply it in manual training and shop work in grade five. This privilege becomes a real incentive to the child, but makes its appeal not only to his original primitive instinctive interest in construction, but also to his acquired interest in the use of numbers.

It is of course to be remembered that the transition from the use of incentives which appeal to the cruder instincts to the use of those which appeal to later instincts and to acquired interests, or, as we may say, the transition from a lower to a higher order of incentives, will be very gradual. The higher incentive must bring some new aspect of an acquired interest into the light by suggesting an untried value for it.

Appeal should be positive. The most effective incentives will inspire positive rather than negative attitudes and activities. There are two possible ways of bridging the gap between the child and his uninteresting task. One is by compelling him to accept an alternative which is less attractive, or more repulsive, than the task itself, the other is by providing an interesting intermediary experience which leads naturally into the task itself. Both will be effective at times, and many incentives will actually contain elements of each, as when a child works hard both to win a prize and for fear he will not win it.

That the positive is the more important element should be kept in mind:

First, because common experience and observation teach us that when we work from fear we work with less confidence in our own ability, and that we go grudgingly, and with much less energy.

Second, because psychological experiments have verified these common observations, and state their conclusions by saying that fear tends to depress and choke up our

channels of energy, while confidence and hope in our work tend to brace us up and to liberate energy for the task ahead.

Third, because, with a negative incentive there will be a tendency for a child to form a mental association, not between punishment and his own laziness or indifference, but rather between punishment and the lesson.

Use negative incentives sparingly. Our last chapter dealt with punishments. If we will reconsider that chapter from the standpoint of this discussion we shall have before us about all that can be said in justification of negative incentives. They cannot be entirely dispensed with in school management, except in rare cases. In managing instruction, though, as opposed to the management of other kinds of behavior, they should be used as sparingly as possible. This is not said with a view to drawing a sharp line of distinction between the task of learning to play, or to keep clean hands and teeth, or to be polite, on the one hand, and the task of learning an arithmetic lesson on the other. The two are psychologically not so unlike as the traditional schoolmaster has made them. The one is a little more directly social in its bearing on the child's present self than the other, but they are both learning processes.

Children meet with disagreeable tasks on the playground just as they do in the recitation room. The only reason we fail to see this is because we have not looked upon the child's playground experiences as part of his constructive program of education. When we have developed play into something real and vital in education, then the need for a study of incentives suitable for play and other lines of social and executive training will appear.

Danger in competitive prizes. Finally, incentives to be effective in school must not be injurious to the many while they serve only the few. It is a poor achievement that is

better measured by what some one else has not done than by what the achievement itself represents. A child is not necessarily good or bright because others are bad or dull. The incentive which involves competition therefore runs the risk of putting emphasis in the wrong place, and may result in teaching a child to wish ill luck to his fellows rather than to strive harder to win for himself.

3. Types of incentives

Incentives vary with age and individual nature. As was pointed out above, the gap which an incentive is to bridge may be very narrow or very wide. The boy who is well up in his language work, but who is not fond of writing themes, may find his recent first experience in a snowstorm an incentive amply strong enough to overcome his dislike of writing. Not so, however, with the boy who not only does not like to write themes but has been scarcely able to keep up with his class. The one knows how and merely needs something interesting to write about, the other lacks basic knowledge and skill. The incentive in one case has merely to overcome a little mental laziness, while in the other it must stimulate the child to seek knowledge as well. Consequently, when we speak of types of incentives, we must remember that we are dealing only with general principles, and that the ultimate test of the value of an incentive lies finally in its actual use.

An incentive which is good from the standpoint of the general principles involved, is not necessarily good everywhere and under all circumstances. *Its function is always specific with respect both to the individual child and to the particular circumstances in question.* The following classification of incentives is suggested as a basis for a critical examination of this important aspect of management.

(a) Incentives more or less incident to the regular organ-

ization and management of the class. There are certain features of school procedure which are indispensable to a proper handling of children in groups, many of which can be made effective incentives for practically all members of the class. Such are grading, promotion, class marks, monitorial services, holiday programs, and school exhibits.

Let us restate in brief form principles set forth above, to which all incentives must conform in order to be effective for service:

(1) An incentive is only a means to an end, and so must not be so attractive in itself, and so widely separated from the end it is meant to serve, as virtually to replace that end.
(2) Its appeal must be direct, and to some basic instinctive interest, or to some present and pertinent acquired interest.
(3) It must as often as possible be positive rather than negative.
(4) It must not be injurious to other children.

With these criteria in mind, let us examine the above features of the regular working machinery of the school to see how they may be turned to good effect in this connection.

(1) *Grading, promotion, and class marks.* Perhaps the greatest evil that attends the use of grading and promotion as school incentives is that they too often become ends in themselves, in the mind of both teacher and pupil. By unpedagogical methods the teacher fairly drags the child through the required amount of work in order that his failure may not reflect unfavorably upon her own efficiency. The child fears demotion or being left behind; or craves the social distinction of skipping a grade; and so in desperation memorizes but does not digest the subject-matter covered. The appeal is to the emulative and social instincts, and it is direct. This is well, but the stimulus often is negative rather than positive, and the desire of the child too frequently is that, if he fail, his friends also will fail, or that

if he is permitted to skip a grade certain others will not be.

This does not mean that these incentives are essentially bad, but rather that it is easy to put the emphasis in the wrong place, and so to destroy what might be a wholesome stimulus.

Competition is not unwholesome when both means and end are legitimate. Good management will see to it that the real end — work done — is attained, and further, that the child shall learn to compete, not only with others, but with his own past record as well. When this attitude is established the value of grading and promotion as incentives is unquestioned.

(2) *Monitorial service.* The necessary monitors for the classroom may be chosen on the basis of merit in a given study one week, on the basis of entire scholarship standing another, and on the basis of deportment or application another, each time making the appointment an incentive for special effort at some particular point. Measured in terms of the above principles there is little danger of abuse of such devices.

(3) *Holiday programs.* Certain places on holiday programs can be made open on condition of attainment in various lines of work, preferably those most nearly associated with the material which the program is to present. Of course all the places could not be assigned in that way, for there will be certain pupils who ought under any circumstances to be on such a program, and certain others for whom such training is not important.

(4) *School exhibits.* Occasional displays of children's work, either in competition with one another or in competition with other schools, will, like interclass and interscholastic games, debates, and spelling matches, tend not only to bring out the very best individual effort but to develop a sense of school loyalty, as well, which is thoroughly

3564

wholesome. The danger here is that the single item for exhibition may receive an undue amount of attention, to the detriment of regular class exercises and routine matters which are of greater importance.

Thus practically all such devices as these must constantly be guarded in their effect upon each individual child if they are to be of large service. They have the advantage of being always at hand, and intimately associated with one or another aspect of the regular life of the school. The teacher who is ingenious in finding out ways to use them and who carefully guards against their abuse, will find incentives of this type valuable sources of help.

(b) Incentives incident to good teaching method. A second group of incentives, which are perhaps more properly thought of as special methods and devices, should at least be mentioned here, if for no other reason than to show that, like the first group of incentives, their function is to elicit interest in the immediate situation and to bridge over the gap from the known to the unknown, or from the old to the new.

(1) *Devices as incentives.* It was pointed out above that the gap to be filled by incentives is sometimes very wide and sometimes very narrow. A story is related, a picture is displayed, some object is measured, a lesson is dramatized, and we usually think of these as teaching devices or as features of the special methods in use. Yet their function is to sustain and direct attention, to develop an interest in the end sought, which is the function performed by incentives. The difference is that in the one case the gap is narrow both in point of time and in knowledge or skill needed, whereas in the other it is wider. In the latter, attention is to be sustained for a longer time, a more permanent interest is to be developed, more work is to be done. This is but a difference in degree and not in kind.

If a *device* is a feature of the refined details of teaching method, then an *incentive* is a feature of the coarser structure of method in the large.

(2) *Types of devices which serve as incentives.* Whether we call these incentives, or devices, or special methods, is not important. It is important that the teacher shall make their use conform to the principles we have set forth for evaluating incentives.

The use of pictures, maps, pets, flowers, field trips, dramatization, underscoring words with colored chalk, writing letters to children in foreign countries, and other devices of this sort, practically without end, would come under this group. They are designed for use in particular situations, and so are highly specialized. Every young teacher should collect great stores of such, and should exercise her own ingenuity in working out new and original ones. To become versatile and resourceful in the use and invention of such incentives should be a constant aim of every teacher who wishes to keep out of pedagogical ruts.

(c) **Incentives not essentially connected with the regular organization or management of the school.** In this group would come prizes, honor rolls, special privileges and immunities, class rank, and public commendation, all of which have been brought into use in the school, not because they are in any way essential to its organization, but because of the strength of the appeal which such things make. Every normal child loves a tussle, either physical or intellectual. To be able to win by main strength or by wit means to the child social prestige, personal power, self-confidence, and success. The big question with regard to all such incentives is: Are they, by the fact of their lacking any real connection with the life of the school, more easily separated from the end which they are designed to serve?

(1) *Prizes.* There are almost numberless incentives of

this class, some valuable intrinsically, and others which bring some special distinction only. The former are likely, indeed will almost surely become ends in themselves, and so violate our principle number one. The latter are only slightly less likely to do this, and both kinds will have the following objections in common: 1, the number of contestants quickly narrows down to a few of the brightest pupils who are least likely to need an incentive, all others becoming disinterested spectators; 2, certain sensitive pupils, who feel themselves losing in a desperate attempt, are depressed and disheartened, and lose confidence in their own abilities; 3, the winners often develop an overconfidence amounting to offensive and, for themselves, dangerous conceit; 4, the tendency is to stratify the children in all social and intellectual matters, whereas the contest may involve only a very narrow mental trait, such as spelling ability. So there is scarcely a point in our principles which is not violated by the use of such incentives.

(2) *Honor rolls, special privileges and immunities, class rank, and public commendation.* It is often argued that when the prize is available for all who attain a certain standard, then most of its evils are done away with. This is at least partly true of the use of honor rolls, but there are certain other considerations which have to be watched. As an incentive for regular and punctual attendance, a monthly half-holiday is often granted, and on such days the children go home or roam the street. The natural inference which the child draws is that school work is regarded by all, even teachers, as hard and disagreeable, and that this half-holiday is pay for having patiently endured nineteen and one half days of it. If this half day were devoted simply to a different line of work, say a field trip to a factory, a shop, a park, a lake, or a mountain side, in which the object is to gather material for Monday's language lesson, or for the

study of civics, nature, or industry, then the prize would in itself become a very legitimate end and would be far more interesting to the child than merely going home. Furthermore it would stimulate interest in school work instead of marking it as drudgery.

So much depends upon how all kinds of prize incentives are used, and they are so easily possible of abuse, that the best advice regarding them seems to be:

1. Use single prizes of intrinsic worth not at all.

2. Use single prizes which mean only some mark of distinction rarely, remembering that the spirit of rivalry is abundantly stimulated on the playground and in debates; and

3. Use prizes which are open to all, such as honor rolls, half-holidays, and freedom from examinations, only when they can be intimately bound up with some legitimate phase of the real work of the school.

(d) **Incentives based upon acquired interests and ideals.** There is, finally, another group of incentives, best characterized, first, by the fact that they are not external either to the school as an institution or to the nature of the child; and second, by the fact that they have to be developed. Such are love of knowledge; pride in the good name of the school; love of justice, honor, cleanliness, fair play, promptness, regularity, and coöperation; and an earnest desire to be worthy of the friendship of teacher and fellow pupils.

We are not born with these high ambitions and purposes, but with right training in the home and school all have capacity for developing them. Though we know all too little about the psychology of ideals, we are all fairly familiar with their practical working. The man who cannot be bribed, who stands by his duty to others in the face of personal loss, who desires power that he may render service, is the man who is living up to his ideals. Such incen-

tives as these cannot be dragged into the school like prizes, they must be developed by example, by good teaching, and by strong personal appeal. They are means and end all in one.

School loyalty is not made up of hurrahs, class songs and yells, and other superficial signs of loyalty, though these may have a place in its making. There must be behind these a common aspiration, a common life, shot through with habits of coöperation, of fair play, of justice, of hard work and clean living. So it is with love of knowledge and other high ideals. They are powerful as motivating forces, once they are firmly established in our conduct as well as in our beliefs.

There is no lesson so dull that an incentive cannot be found which will make it interesting to the normal pupil. Sweeping out the office is uninteresting to the boy passing by, but not so to the boy inside who looks upon his work as the beginning of a professional career. It is the teacher's business to help her indifferent pupil to the office boy's point of view. This she can do if she is resourceful and constantly on the alert for new motivating material.

4. Incentives, and some newer methods of teaching

Incentives and the socialized recitation. The study of this problem of incentives has led more recently to some interesting developments in the field of methodology. We have heard much in recent years of the socialized recitation, of motivation of school work, the project method, the Dalton Laboratory Plan, and many more. Running through all these conceptions, at most only partly new, are two ideas that are of interest to the student of this problem of incentives. These two ideas are suggested by the terms "socialized recitation" and "project."

A socialized recitation is a coöperative enterprise in which

there is free and reasonably informal discussion of the lesson. This is merely an extension of the older question-and-discussion type of work, but it is a rather important extension. In the older form the child recited, answered questions, and occasionally asked a question. The procedure did little to stimulate interest in the total performance. Each pupil was held to account by the teacher, who took the initiative and assumed responsibility for the development of the lesson. The class consisted of a number of individuals, no one of whom felt responsible to any other one, and no one of whom felt responsible for planning the work.

The socialized recitation includes discussion and questions, but it introduces also the idea of group effort and group responsibility. Thus the pupil who has worked side by side with others, but always as an individual and as a follower, now becomes a member of a firm jointly responsible with others for the development of the lesson.

The thought here is that in this kind of social activity the child finds an incentive for serious independent thinking, and he experiences something new in the form of responsibility for taking a hand in the lesson. He will be dealt with by his fellows if he becomes too inquisitive or if he talks too much, and may be brought to task by questioners if he remains too silent. In this he senses what it means to behave as a member of society, and the experience, being stimulating and enjoyable, provokes real effort.

Incentives and project work. The general idea of the project method is, that instead of having set lessons as suggested by the usual textbook, the child will pursue a piece of work that seems to him to be a single unified whole, the beginning and end of which he sees from the start as he does not see those in a textbook course. This unified piece of work — such as making a table, dressing a doll, preparing

plans and dramatizing some incident in history or literature — becomes a project when to this comprehending of unity the child adds a purpose to do, to carry out, to interpret, or to analyze for himself.

One may choose to apply the term project to "the making of an object," or to "the purpose and will and pursuit of the task of making an object," or to "the object itself." Our interest here is in the total situation: child facing a set of facts, a piece of work, or a task which he comprehends as a whole, to which he wants to react, and to which he does react in a way that results in his mastering the task. Something appealed to him. The fact that he grasped it as a whole and saw in it a possibility of doing something that would give expression to his own power was undoubtedly a large part of the inducement (incentive) to attack it. Having attacked it, the desire to possess the finished product (object or analysis or set of facts) must have entered as a further stimulus (incentive) to work to the end; and finally, having completed it, the thrill of success must have urged him on to seek new worlds to conquer.

These are illustrations of how we are seeking to motivate the child's work to the end that he may: 1, get work done; 2, get experience in actual group effort; and 3, learn to work independently.

5. Summary of Part II

In Part I we set forth the ends which are to be sought in the child's training, showed how these ends function in the management of the school, and described the materials with which the teacher has to deal. In this Part we have discussed the pupil as the object of all management, explaining how he is to be brought into an understanding of his place as a member of the school group; the problem of attendance; order and discipline; school punishments; and incentives in management.

Upon entering the school the child's first problem is that of becoming oriented with respect to his duties and privileges as a mem-

ber of a new social body. The teacher's problem is that of assisting him in making the right contacts with this institution.

The question of attendance thus becomes of very first importance, and that not to the pupil alone, but to the school and to the State as well. As a management problem it usually presents itself in the form of truancy, irregularity, or tardiness, and each case demands individual treatment, for the reason that its causes lie within the numerous influences under which the child lives and works. The teacher is especially advised to look closely into the child's school relationships as a possible source of the trouble.

The second problem was that of order and discipline. Discipline here was thought of as those modes of conduct which are peculiarly appropriate to school life, and the teacher's problem as that of determining the most suitable practices, and then of applying to those practices the common principles of politeness, honor, and integrity which prevail everywhere. For the teacher it is a matter of developing within herself the power to lead, and her study is always of how to apply that power to individual cases.

The third problem, that of punishments, brings the pupil into his most critical relationships with his social group, and the teacher into her most critical teaching relationship with the child. Punishment must mean pain to the offender, and must result in his realization of a broken relationship with his school for which the responsibility is his very own. The offender must be made to feel the power of public indignation at his wrong if his punishment is to weigh heavily with him. This the teacher's leadership must provide for, all cases being treated impersonally and in terms of their individual merits.

Finally, we have discussed the difficult but important question of incentives: what an incentive is, what makes it effective, and the different types of incentives that are possible of use in the school. One's incentives for doing a thing are his reasons or motives for doing it. Where, as is necessarily the case in many instances in the school, the task is not closely related to the child's present interests, it is necessary to bridge the gap between them. This is the most vital point in the entire teaching process. To be able to select facts, incidents, and exercises that will serve as a means to this end is the teacher's problem. This requires intimate knowledge of the child and of the task, and skill in manipulating the incentive in terms of the child's peculiar needs.

We have grouped incentives as those incident to school organi-

zation and management, those incident to good teaching method, those not essentially connected with school work, and those based on acquired interests and ideals.

In these chapters the reader should have come to realize that the child is the center of all our interest as we develop machinery for dealing with children in large groups. Children are widely different from one another in their power to learn, and the test we set for ourselves in the remaining portion of this book is: Can the machinery of school management be so constructed that it will recognize and make full use of this wide diversity in human nature while adjusting itself to the welfare of the group?

QUESTIONS FOR DISCUSSION

1. What is meant by the term incentive, and why are incentives needed in school work?
2. Explain how the study of incentives comes to be a study of the psychology of interest and attention. Why do we call one task interesting and another not interesting? Does the effort which you or your pupils put forth because of interest in a task seem to you to have the same, greater, or less disciplinary or educative value than the effort which is put forth under some penalty or disagreeable circumstance? Cite cases to illustrate.
3. Why is it that a given incentive may be effective with a child one day and not the next, or with one child and not with another? Does this answer explain why a successful use of incentives in the school involves careful judgment and skill on the part of the teacher, as well as a knowledge of the object or activity used as the incentive?
4. Can you recall a case in which an incentive failed because the pupils treated it as an end instead of a means?
5. State the four principles to which an incentive must conform if it is to be effective.
6. What is the difference between an incentive and a device? Explain how they are alike.
7. What is meant by a negative incentive, and what is the most serious objection to its use? Under what circumstances are negative incentives justified? Give illustrations of where they would be effective, and also of where they would be ineffective.
8. Suggest an incentive that would be useful to one pupil but detrimental to others.
9. Make up as long a list of incentives as you can for each of the four general types mentioned above.
10. Show how the following incentives may be made effective: promotions, prizes, class monitors, school exhibits, field trips, pictures and

railroad maps, freedom from examinations, love of truth, school loyalty, love of knowledge.

11. Take the same list and explain how each may fail of its purpose, stating its failure in terms of the four guiding principles laid down.
12. When may an incentive be used legitimately as both means and end? Explain a case that could be worked out by the teacher.
13. Why is fear of having to copy a list of words, commit something to memory, or remain after school for study, almost invariably a wrong incentive?
14. Is an incentive something that is supposed to replace teaching effort, or is it merely a part of an effective teaching process? Explain.
15. Define: "project method," "socialized recitation."

PROBLEMS FOR STUDY

1. By reference to any of the books on project teaching, select a project for a third-grade pupil in arithmetic. Outline the project, and explain how you would put a pupil to work on it. Explain how the procedure would provide good incentives at various stages of the work.
2. If we think of a desirable incentive as one which provokes genuine continuous effort to accomplish an end, such as to make or to undo something, to go somewhere, or to gain a certain knowledge or skill, then suggest how a teacher might try to provide incentives for the following:
   a. Memorizing a selected poem.
   b. Making a copy of a map.
   c. Dramatizing a harvest scene.
   d. Preparing rules and bylaws for a school club.
   e. Describing the procedure in a court trial.
   f. Preparing a cage or a home for a newly adopted pet.
3. Explain how you would try to develop right incentives for the following cases:
   a. The children are decidedly untidy with their papers and books.
   b. The children are crude in dress, speech, and manners.
   c. The handling of wraps on entering the building is slow, noisy, and generally lacking in orderly procedure.
   d. The class hates arithmetic. (For instance, the fourth grade.)
   e. A child has lied and deceived the class and the teacher, and when found out refuses to admit his guilt.

REFERENCES FOR ADDITIONAL READING

Bagley, W. C. *Classroom Management*, chaps. XI, XII. New York, The Macmillan Co., 1908.

Collins, Ellsworth. *An Experiment with a Project Curriculum.* New York, The Macmillan Co., 1923.

Dewey, John. *The Child and the Curriculum.* University of Chicago Press, 1909.

Dewey, John. *Democracy and Education,* chap. x. New York, The Macmillan Co., 1916. Excellent as a brief statement of the underlying principles for this chapter.

Dutton, S. T. *School Management,* chap. III. New York, Chas. Scribner's Sons, 1903.

Fraser and Armentrout, *Introduction to Education,* chap. VIII. Chicago, Scott Foresman & Co., 1924.

Kilpatrick, W. H. The Project Method, *Teachers College Record,* Sept., 1918.

Minor, Ruby. *Principles of Teaching Practically Applied.* Boston, Houghton Mifflin Co., 1924.

Mirick, George A. *Progressive Education,* chaps. XI, XII. Boston, Houghton Mifflin Co., 1923.

Stark, W. E. *Every Teacher's Problem,* chap. VII. New York, American Book Co., 1922.

Stevenson, John Alfred. *The Project Method of Teaching.* New York, The Macmillan Co., 1921.

Thomas, Frank W. *Training for Effective Study,* chap. VIII. Boston, Houghton Mifflin Co., 1922.

Wells, M. E. *The Project Curriculum.* Philadelphia, J. B. Lippincott, 1921.

White, E. E. *School Management,* pp. 130–89. New York, American Book Co., 1893.

Wilson, H. B., and G. M. *Motivation of School Work,* part I. Boston, Houghton Mifflin Co., 1916.

PART III

THE MACHINERY AND THE PROCESS

CHAPTER IX

ORGANIZING THE SCHOOL

Outline of Chapter

1. The problem of Part III.
2. The nature and purpose of organization: Division of labor a necessity — Organization means systematization and economy — Organization as means and as end.
3. Plans for the first day: Importance of first day — Getting oriented — Putting the schoolroom in order — The teacher an example in promptness — Starting and organizing the school — Advance planning makes all organizing easier.
4. Mechanical features of the organization: Routine procedure — Entering and leaving the building — The fire drill — Handling wraps — Distributing and collecting papers, pens, etc. — Leaving the room — Keeping desks and room orderly — Personal cleanliness — The daily program and other details — The necessary signals.
5. Summary — Questions — Problems — References.

1. The problem of Part III

Thus far we have thought almost exclusively from the point of view of the individual child, keeping the group aspect and the machinery of the school somewhat in the background. This has been done in order that, first of all, we may have the idea fully established that the school is made up of children, and that the ultimate test of the school and of its management is what they can do for the individual child. We have not, however, ignored the fact that the child's world is social, as well as intellectual and physical, and that his training is to take place very largely within a group, and that it is always training for group life. In chapter five we attempted to show something of what this group life in the school may mean to the child if he is properly managed with respect to the social aspects of the institution of which he becomes a part.

In this section of the book it will be our purpose, not to lose sight of this viewpoint, but to examine the machinery essential to the management of children in groups and to study the processes by means of which this machinery may

be made effective as a means for achieving the principal aims of the school. The organization of the physical features of the school; the organization of the children, of the curriculum, and of the day's work; the planning and directing of the efforts of the group at study and in recitation; the checking up of results by group tests; and the changing and shifting of machinery to meet the constantly expanding needs of the children and the community — these will constitute our problem here. In this we shall combine the study of the bare structure, the fixed and static features of the school, with a study of those flexible and dynamic features which are essential to the proper functioning of the structural parts. Thus we shall avoid the necessity for studying the machinery of the school aside from the part it plays in making for economy and effectiveness in the group enterprise.

2. The nature and purpose of organization

Division of labor a necessity. Education has become one of our most popular enterprises, and with this increase in its popularity has necessarily gone a great increase in the diversity of its interests. Hence the school problem has become rapidly more difficult, both from the standpoint of numbers of children and from the standpoint of aim. The school is no longer a mere matter of teacher and pupil, it is a whole State and its children trying to conserve the best ideals of the past and to anticipate the endless variety of occupational, social, and cultural needs of the future.

The principle of division of labor has therefore become a pressing one, and the school organization of a decade ago finds itself ill adapted to the school problems of to-day. The State, the county, the city, and the district officials unite to form a vast machine for handling this problem in the large, and it is within this larger system that each teacher is to operate, not as a mere cog in a wheel, but as

an intelligent personality, responsible for the solution of certain details in the greater problem. The purpose of this machinery is only to systematize and to divide responsibility, to the end that such specialization may result in efficiency. The teacher needs this larger perspective for her work in order that she may be the better able to define her own immediate aims and to relate means to ends in attaining them.

Organization means systematization and economy. Without forgetting the principle set forth earlier in the book, that *every moment of time and every piece of school machinery must give educational account of itself*, we may set it down here that a further requirement of all organization is that it shall accomplish its ends with a minimum loss of time and energy and with the greatest possible stimulus to right effort. That is, organization must mean systematization of work with reference to its proper aims.

There are many factors to be dealt with in school organization, some of them more or less fixed and unchangeable and others quite adjustable. As the teacher faces the task she must recognize not only that she will have to organize and operate with reference to these fixed points in the situation, but also that her class is part of the more comprehensive machinery of the school and the school system. She cannot alter the plan of the building or of her room, with their entrances and exits, cloakrooms, and windows, and she will have to recognize the main structure of the printed course of study. Beyond these, however, there is much to do to put things in order. It is with reference to the fixed limitations of the building and the courses of study that she will have books, papers, supplies, wraps, and materials to store, distribute, and collect; she will have children to classify, seat, and move into and out of the building and to the library and the blackboard many times each day; and

she will have to break up the course of study into lessons, and adjust the hours of the day to recreation, study, and recitation. To bring all this to order, to the end that the modes of procedure — that is, the organization — will not only economize time and energy but will in themselves produce a cultural effect on the children, is the teacher's task of organizing her school.

Organization as means and as end. We cannot too often or too insistently restate the principle that good organization must serve both as a means and as an end. It will not only facilitate study and recitation, but will establish habits of economy in respect to the use of time, furnish useful drill in coöperative movements, and in all give excellent training along executive lines. The boy who has learned how to keep his place in line, how to arrange and distribute materials with dispatch, how to put his own desk in order, has learned something that will be useful to him outside of school. In thus organizing it is not a matter of imposing a system upon the school, but rather of reducing the normal procedure of the school to a system.

Not all organization, however, will thus reduce itself to mere mechanism. Some plans are for activities which run through the whole term without change and will quickly reduce themselves to habits, while others have to do with activities which are not often repeated, or which are for individual rather than for group guidance. These will have to be made anew for each occasion and followed out consciously rather than mechanically. These latter have to do more especially with the handling of the study and recitation of lessons, while the former have to do almost exclusively with the movements of the children and the handling of equipment.

3. Plans for the first day

Importance of first day. To bring this conception of organization to bear on the teacher's preparation for her first day's work is very important. First impressions are lasting ones, and the teacher should make that day stand out as one with a clear-cut program of orderly and effective work. Instead of being given over to leisurely registration of pupils and assignments of lessons, it should be the first day of regular work as nearly as possible under the conditions that will prevail throughout the year. This means that the teacher must be prepared with very specific plans covering every feature of the day's program.

Getting oriented. Such plans begin with her own work in its relations to the school, or even to the city or county as a whole. What is the larger educational problem of the community? What is the general policy, and who is responsible for making that policy? To answer this she should obtain recent copies of annual reports, bulletins, circulars, courses of study, and syllabi, if any such have been published, and look them over. If there are no such publications, then a personal conference with her principal, supervisor, or city or county superintendent will be desirable, in order to talk over in advance the general plans for the year's work. Early teachers' meetings and the principal's bulletin board will clear up the problems common to all teachers in the building.

The teacher's own preliminary arrangements will call for a visit to her building and room, where she will familiarize herself with the plans of entrance and exit for the children; with where the wraps are to be placed; with how to regulate the ventilation and light; with the arrangement of desks and blackboard, the location of drinking fountains, lavatories, and toilets; with the facilities indoors and out for play activities; with the library; and with the location

of maps, charts, pictures, chalk, pencils, and paper. She will find the last year's register, with some information about the children and their work; and perhaps a well-marked copy of the course of study. Nor will she forget to leave such information for her successor when she moves to another room or position.

Putting the schoolroom in order. Preparatory to beginning her work the teacher will see that her room is in order. This means a great deal, again, partly because of the influence of first impressions. The room should be clean, the blackboards and chalk trays ready for use; supplies of pencils, pens, and paper should be on her desk, and the place should look inviting. The room should be light and airy, the pictures should be properly hung, and the bookcases, tables, and chairs should look neat and orderly.

The room should also be made to look like a place for work. In a one-room school or a school with several grades the blackboards may well contain questions, problems, and assignments for various classes. Books should be in evidence, and a daily program (tentative perhaps) should be ready to point the way through the day's work for each class.

The teacher an example in promptness. When the first day arrives the teacher should be in her room early. She should call at the principal's office for a moment, not to visit, but to receive any final instructions regarding the plans for the day, or to ask any necessary questions. She should greet any of the other teachers she meets and then go to her room to be ready to meet the children as they arrive. She has already arranged her room and so on this morning has merely a few details to look after. Those should not prevent her from meeting her pupils and answering their questions as they enter, all anxious to see the new teacher.

Starting and organizing the school. When the gong or bell calls the children in she should know precisely how they are to enter. She should know where she is to be, just where her class will form into line, and just how they will enter her room. She should know exactly how the wraps are to be disposed of, and what she is going to say and do "next." If these plans have all been carefully worked out beforehand they should go through perfectly. The opening speech should not be long. A very few remarks, not about what "you must or must not do," but about what "we are going to do" this very day. While talking the teacher should also be working, handing to the children in front slips of paper and pencils to be distributed to those in the seats behind them. Soon all are busy writing what she has asked for: name, age, grade, name and address of parents, and any other information necessary for the system of individual records which she will prepare for the principal's office.

These slips are collected by the same method. The teacher now unrolls the daily program and hangs it up where all can see, while monitors pass out the books or other articles next needed. Things are so well planned and so quickly and simply explained that these new monitors are catching the spirit of this very quiet but very business-like teacher, and are passing it on to other children who are busy following directions. The first section of the program is explained, assignments are made, and soon one group is busy preparing a lesson, and another with the teacher at the board, perhaps, with some work she placed there the day before. Somehow it is only about nine thirty o'clock, and all are at work. The opening speech is past and the school is actually running.

Advance planning makes all organization easier. It is easier to give these instructions than it is to carry them out,

but here they are, without mention of the thousand details and interruptions which the teacher will have to meet, and the only other suggestion is that no teacher will ever open her school in such an ideal way who has not learned two important lessons: first, how to plan her work so that she will know exactly what she is going to do; and second, how to make every moment of her time count. If these lessons have been well learned the children will return to their homes at night with a definite idea of what they have done and of what they are to do the next day, and also with the right kind of fireside report about the new teacher.

4. Mechanical features of the organization

Routine procedure. Certain parts of the organization must be reduced to habit as soon as possible, both because a thing done by habit will be done in the same way each time, and because it will be done more speedily. Such routine procedure has sometimes been looked upon as being suppressive of individual initiative. It would, of course, be possible to carry it to such an extreme as effectively to prevent children from thinking for themselves. It is not militarism, or blind obedience that is wanted in the school, except in a few places where blind obedience can render the best sort of service to the individual as well as to the group. Most of the routine proposed here will be of such a character as to recommend it, both for its educative value to the individual and for its value in facilitating the movements and work of the group.

The psychology of habit formation demands: first, strict and full attention to the activity that is to be reduced to habit; and second, continuous drill which allows no deviation from the original mode of procedure. This law is another excellent reason why certain of the teacher's plans should be fully worked out and carefully executed the first

day. If it is decided to have children march in to music, then the sooner this plan is initiated the better it will be for the habit that is to be formed.

Entering and leaving the building. This will be a simple or a complex matter according to whether the building is of one room or of many rooms or stories. In any case, marching in will serve as an excellent opportunity for teaching children how to walk and how to coöperate in filling or emptying a building. A fairly good speed will prevent dawdling, save time, and give a proper tone to work when the children arrive at their seats. A little study of how fast the line can move to advantage will be desirable. No slovenly behavior of any sort should be permitted. If talking in a low tone while in line is found to interfere with the movement of the line it should be stopped. There are few places where some supervision of the lines will not be necessary, though the idea of self-government in the lines should be cultivated.

In most schools these lines will form and pass to or from the building at least eight times a day, or forty times a week. If it takes two minutes for each trip, that means more than five hours per month devoted to this exercise. It would be a pity if nothing of real value came from the expenditure of so much time. The aim should be, first, an orderly entrance and exit in as short a time as is conducive to safety and comfort; second, careful training in how to keep the chest and head up, and how to move with accuracy and decision. That is, demand of this bit of machinery that it shall not only be a means to an end, but that it shall show in the carriage and manners of each child a definite educational output.

The fire drill. At irregular intervals, in buildings where there is the least danger from fire, these very same lines will be formed and the very same movements will be gone

through with at a slightly increased speed. Such drills should always be strictly supervised by the teachers, who will invariably be the last persons to leave the building. Drills will be called at the times least expected, and if a call comes at any time when the children are in process of entering they should be drilled in facing about and reversing their movements. In such drills the lines should not break till the last child is some steps from the building. This insures against fright or panic of any sort.

Handling wraps. Some forty times a week the children's wraps must be handled. Where it is possible for the lines to pass through the cloakrooms the wraps may, during most of the year, be deposited on assigned hooks as the children enter and leave. Where this cannot be done a group of monitors should be assigned to collect and distribute them. Here careful planning needs to be done in advance, and the time accurately figured. Once the best time standard is established, the monitors, newly appointed from time to time, will know what is expected of them, and they will take pride in living up to the standard set.

Distributing and collecting papers, and pens. There is constant need for a plan of distributing the necessary books and supplies which the children use at their seats, and most of this sort of work can be done according to a set plan by monitors. Where papers are to be collected, they may sometimes be passed forward, the children in the front seats placing them in orderly piles on the teacher's desk.

In all such work the teacher will need to watch the time consumed and keep her standards for speed and order high. Each moment lost by a monitor means not one moment but as many as the number of pupils he serves.

Leaving the room. Freedom to leave the room at will is desirable, but such privilege is almost sure to be abused. While over-leniency is a little better than too great restric-

tion, there is an opportunity here for some very important work. Though the subject of the proper use of the toilet is perhaps a delicate one to handle, it is an important one from the standpoint of health as well as from that of social and moral development. A frank but good-natured talk with the boys and girls separately will go far toward starting right habits along these lines.

Keeping desks and room orderly. Good order about a pupil's desk first of all expedites his movements in getting the book, pencil, or paper he wants without bending over to look for it. Secondly, an orderly desk is conducive to clear thinking. Knowing exactly where this or that book or paper is will be next to knowing where this or that idea is. Habits of this sort can easily be extended in number and variety to include the entire room and playground, to the end that bits of chalk and paper on the floor will be picked up by the first child who sees them, the basket ball will always be in its place, and the window shades and pictures on the walls will be straight.

Habits of this sort will not form themselves, however. The very first day they should be started carefully, and then, with eternal vigilance, one may hope to succeed in getting all these things done so perfectly that they need not be thought about.

Personal cleanliness. Along with these habits go those relating to personal cleanliness. John's stubborn hair can be parted if he works long and often enough with it. Many children have never learned to clean their teeth and nails at home, and some appear never to have learned to keep their hands and faces clean. It is not only the business of the school to teach the importance of these things, but it ought to be one of its first and most important duties to fix such knowledge in the form of established habits.

The daily program and other details. There are certain

other features of the necessary organization which involve habit formation to a limited extent, such as the order of study and recitation periods — which will be treated in a separate chapter — the arrangement of written work, the use of reference books, and the passing of articles to other pupils. The customary routine of roll call will be made unnecessary by the fact that, since the children are assigned permanent seats, the teacher has only to have the seats numbered, to note down the numbers of the vacant seats on a card, and to make the record in the evening as she is preparing her room for the next day's work.

The necessary signals. Some kind of simple system of signals, such as words or movements, will be found necessary in order to produce unity of action. A bell or gong sounds three or five minutes before time for entrance. Games cease and children go to the drinking fountain or lavatory to make ready for the second bell, which means form in line. Immediately the line is formed some one teacher or older pupil at the entrance gives the signal, a simple tap of a bell or wave of a hand — and the line enters, each child passing promptly to his or her seat without delay. If wraps were not deposited on entering, a second signal starts the monitors who collect the wraps, which are found on the side of the desk near the aisle down which the monitor passes. In some rooms a simple signal for beginning work is desirable for the sake of the few who have not learned to make the right use of time. In calling classes, and collecting and distributing supplies, other signals are necessary. In all cases avoid the noisy or ceremonious. The quiet businesslike way is best and most effective in all cases.

In all the above plans the aim is concerted action, promptness, and regularity. While these habits are all specialized for school purposes, yet every one of them is of value in

itself. Some are for reasons of health and general cleanliness and refinement; others are insurance against panic, and might be useful, to a certain extent, in a burning theater or a sinking boat as well as in a school building; others are essential elements in all scientific and scholarly training, and not one of them robs the child of anything that is essential to his individuality or initiative, nor do they accustom him to too much blind obedience.

5. Chapter summary

In this chapter we have explained the problem that is to be treated in Part III, where we change from emphasis upon the individual to emphasis upon the group. Here we have tried to make clear that all effective school machinery must serve both as means and as end. That is, it must not only conserve both time and energy, but must furnish the child with useful knowledge, skills, and ideals as well.

We have shown the application of these principles in suggested plans of organization for which the teacher is responsible. From what has been said it should be clear that habits of order in entering the room, in distributing supplies, in promptness, in keeping the desks and room clean must be firmly established, and that success depends, first, upon a right start, and second, upon everlasting persistence in keeping at it.

QUESTIONS FOR DISCUSSION

1. In beginning your own first teaching, to what extent did your earlier experience as a pupil dictate your schemes of organization? To what extent were you later forced to change those first plans?
2. State the law of habit formation, and explain what it would mean to apply that law in organizing your school.
3. Explain how some feature of organization may be of use as both a means and an end in teaching.
4. Why has the increased popularity of education made new demands upon organization? What are some of these?
5. What would an inexperienced teacher want to talk over with her principal or superintendent a week before school opened?
6. If you were to teach your first school in the country, and could not go for a personal conference with your county superintendent, what questions would you ask in a letter? Formulate a definite list of such

questions, keeping in mind that none but definite questions can be answered satisfactorily.

7. Supposing you are to teach a rural school, tell what you would expect to learn and to do on your visit to the building the day before school opens.
8. Suppose that you have accepted a position in an eighteen-teacher school, and that you are going for a conference with your principal. Formulate a list of questions you expect to get answered in that conference. Formulate a list that you might be called upon to answer.
9. Suppose that you have thirty pupils, and that you occupy a room on the second floor. The pupils have just entered, and the monitors have the wraps half collected when the fire gong sounds. Make a list of the commands you would give, and describe the procedure you would follow.
10. Write out a little speech which you think might be appropriate for a rural teacher to give to her thirty-five pupils on the first morning of her first day at the school.
11. What would you expect to accomplish by having the children march in and out of the building every day?
12. With the chapter on incentives in mind, explain how you would make use of the monitorial positions as incentives in your rural school.
13. Supposing John abuses the privilege of leaving the room at will, write the necessary note to his mother.
14. Tell how you would keep your attendance record without calling the roll each day.
15. About how much time would you expect to consume per week in the following activities in a rural school of thirty-five pupils of all grades: (1) entering and leaving the building; (2) disposing of wraps?

PROBLEMS FOR STUDY

1. If you are a teacher, what have each of the following to do with the work of your own room or class:
   a. The voters in the district
   b. The Board of Education
   c. The Superintendent (city or county)
   d. The business manager
   e. The building superintendent
   f. The general and special supervisors
   g. The principal in your school
   h. The janitor in your school
2. Draw up a plan with full details, showing how you would move the children into the room, how you would handle the wraps, how you would seat the pupils, and how you would move them out to the play-

ground. Be ready to explain the educational and economic values of your plans.

3. Visit a school and a class in the school, and describe the features of the room organization as discussed in this chapter.

REFERENCES FOR ADDITIONAL READING

Bagley, W. C. *Classroom Management*, chaps. II, III. New York, The Macmillan Co., 1908.

Colgrove, C. P. *The Teacher and the School*, chap. V. New York, Charles Scribner's Sons, 1910.

Patri, Angelo. *A Schoolmaster of the Great City*. New York, The Macmillan Co., 1917.

Wray, A. *Jean Mitchell's School*, chap. II. Bloomington, Ind., Public School Publishing Co., 1902.

CHAPTER X

GRADING AND PROMOTING

Outline of Chapter

1. The problem of grading: Our system taken for granted — System *versus* the individual.
2. Class and individual systems of instruction: Group work a necessity — Group *versus* individual instruction.
3. The proper bases for grading: Grading related to other problems — Possible bases — When children may work together — Correct bases — Individual differences in general intelligence — The distribution of intelligence — How these differences show themselves — Teacher must understand scientific tests.
4. Difficulties in applying these principles: Difficulties stated — Practical solution — Teacher's judgment not trustworthy — The principle applies in ungraded school.
5. Flexibility the essential element: Need for frequent reclassification — Two ways of obtaining flexibility — The single-course plan — The multiple-course plan — Results under the multiple-course plan.
6. Promotion by grades and by subjects: The old annual grade promotion plan — How to overcome these evils.
7. Keeping the children adjusted: Readjustment a continuous need — Knowing her pupils — Detecting and measuring misadjustments — Age-grade position — Rate of progress — The teacher's interests in these measures.
8. Summary — Questions — Problems — References.

1. The problem of grading

Our system taken for granted. The idea of graded schools and courses has been so long established in practice that we are inclined to pay more heed to the smooth working of the machinery than we do to the ends to be served. As one looks at Figure 1, he is impressed with the orderly arrangement of a school system. We read there that the city of Berkeley has seventeen elementary schools, four junior high schools, and one senior high school. The Franklin School of three buildings has twenty-one classrooms, in which six hundred and twenty-one pupils are housed for instruction. These children spend their first year in the kindergarten and their next six years in grades one to six inclusive. From here they follow the arrow down to the Burbank

Junior High School, where they spend three years, from which they pass to the senior high school to spend three additional years. Normally a pupil enters this system at the age of five years and completes it at the end of his seventeenth year.

As one reviews this chart, which, in the matter of grading, is typical of American public schools, he is impressed with the very precise and orderly arrangement. Each block in the bar stands for a group of children, and for a collection of subject-matter, and one thinks of the children moving block by block through the system as the years pass.

System *versus* the individual. On reflection, two observations come to mind. Does this grading system work as smoothly as the chart suggests? And, what are the facts and principles to which its shaping and operation have to conform? Was it worked out in terms of the children and their needs, or is it merely an administrative framework through which the child is shifted more or less automatically and without regard for his particular interests or abilities?

If the system is in line with the conception of education set forth in Part I above, then it has to be built up, and we are obligated to operate it in terms of the requirements of the children. This means that it must facilitate learning, not only in the broad sense that it will enable a child to fit into his proper place without loss of time, if he should move from school to school or city to city, but in the sense that it will enable each individual child to work up to the proper limits of his capacity to do the work of the school.

Let us inquire why such a system is necessary, upon what principles it must be constructed, what are the practical difficulties to be overcome in using it, and by what devices we are able to meet and solve these difficulties.

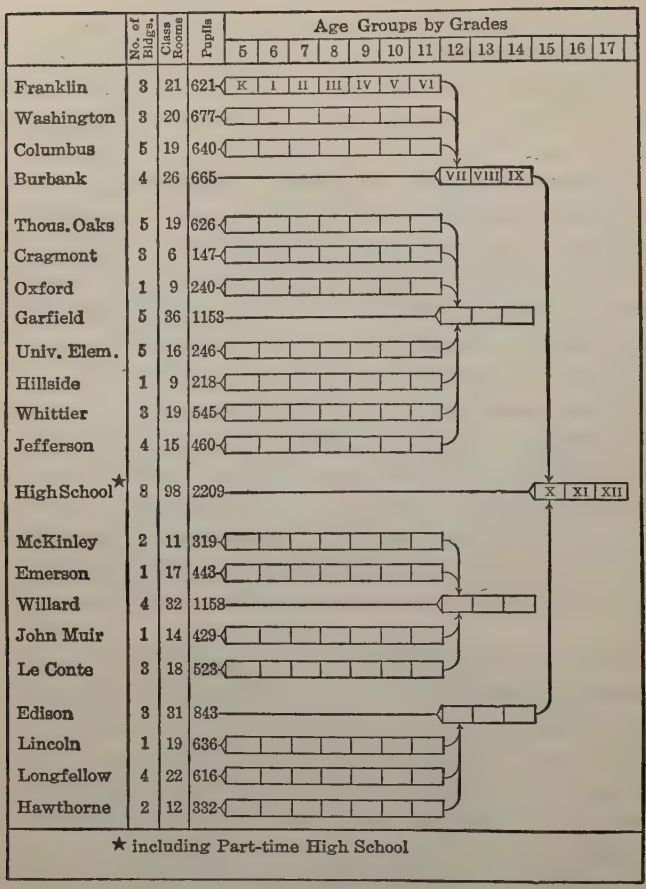
No. of Bldgs.
Class Rooms
Pupils
Age Groups by Grades
5 6 7 8 9 10 11 12 13 14 15 16 17
Franklin 3 21 621 K I II III IV V VI
Washington 3 20 677
Columbus 5 19 640
Burbank 4 26 665 VII VIII IX
Thous. Oaks 5 19 626
Cragmont 3 6 147
Oxford 1 9 240
Garfield 5 36 1153
Univ. Elem. 5 16 246
Hillside 1 9 218
Whittier 3 19 545
Jefferson 4 15 460
High School★ 8 98 2209 X XI XII
McKinley 2 11 319
Emerson 1 17 443
Willard 4 32 1158
John Muir 1 14 429
Le Conte 3 18 523
Edison 3 31 843
Lincoln 1 19 636
Longfellow 4 22 616
Hawthorne 2 12 332
★ including Part-time High School

FIG. 1. BERKELEY, CALIFORNIA, PLAN OF INSTRUCTION
From *Berkeley School Properties Survey*, 1926, Board of Education, Berkeley, California.

2. Class and individual systems of instruction

Group work a necessity. In the previous chapter we dealt with the more or less external features of the school's organization, taking classes for granted. Here we are to

examine the principles and plans essential to the formation of these instructional groups. The problem is at once one of economy and of sound teaching principles. A community has a large number of children to teach, there is a fairly well-defined body of knowledge to be taught, and financial resources are in a measure limited. How best to give to each child this common fund of knowledge and experience, and how to do this in the most economical way, is the question.

The basis upon which such groups will be organized will depend upon whether we expect to teach the pupils together, as a class, or separately, as individuals. If by groups, then they must be organized somewhat on the basis of the work they are capable of doing; if by individuals, then each pupil must be permitted to work as rapidly as he can without reference to what others can do.

Group *versus* individual instruction. What are the relative merits of these two points of view? The arguments for the class plan of instruction are:

1. It brings the child into intimate contact with other pupils, whereby he learns that there are children who are as original or as stupid as he, and so learns to know his own ability in terms of the abilities of others.
2. He is forced into competition of all kinds, competition in ideas, in speed and accuracy, in the requirements of the various skills, and in good manners, and is thereby stimulated to do his very best.
3. He learns how to coöperate with his fellows in all the various class exercises.
4. Through these intimate contacts he develops a more cosmopolitan point of view, a broader basis for human sympathy, and a saner view of his own rights and duties.
5. Practically none of these things can be effectively accomplished by strictly individual instruction.

Certainly life outside of the school is full of competition

and coöperation, and certainly for training along executive lines these social contacts are indispensable.

The advocates of individual instruction, on the other hand, will insist that:

1. Group instruction attempts to meet the needs of the fictitious "average child," and so loses sight of individual differences.
2. It tends to become mechanical and to operate on the principle of the survival of the fittest.
3. This failure to meet the needs of the individual causes great nervous strain on the weaker pupils.
4. Group instruction tends to discourage those who find it hard to keep up with their grade.
5. Individual instruction in most of these matters has the opposite effect of conserving the health and energy of the individual and of adapting the method and the content to the particular needs of each child.

These arguments seem to the writer to point out abuses which are entirely possible but by no means inherent in the group system. There must be a middle ground between these extreme views which will conserve the best elements of each without including the evils of either. This ground the graded system has attempted, during the last half-century, to discover.

3. The proper bases for grading

Grading related to other problems. Any system of grading is intimately connected with two other problems in school organization, namely, that of curriculum making and that of promoting children from grade to grade. For each group of children there is a corresponding section in the course of study, and the promotion of a child from one grade to another must mean that he has completed one section of the course of study and is ready to begin the next.

Here we are concerned with two problems: first, the relation between groups of children on the one hand, and the

relation between groups of subject-matter on the other; and second, what are the principles underlying the organization of each. (The organization of subject-matter will be treated in the following chapter.) Shall we group children in terms of an arbitrarily prearranged course of study, or must the length and character of the sections of the course of study be determined by the nature of the group of children to be taught?

If we were to organize the subject-matter of arithmetic in the most careful and logical manner we should find that the natural divisions of the subject would be unequal both in length and in difficulty, and the same would be true of history or geography materials. Secondly, the logical divisions of arithmetic would not correspond in length to those of history. This being true of other subjects, we can readily see that the bare logic of subject-matter cannot become the basis for the organization of the curriculum, to say nothing of its significance for the organization of groups of children.

What then are the principles underlying the grading and classification of children? The aim of grading is to make it possible to teach a given subject to a number of children at the same time. This means that the children must be homogeneous with respect to the task, and our problem is to find the essential basis of this homogeneity.

Possible bases. There are numerous ways in which we might group children for instructional purposes.

1. We might group them with respect to sex. But while investigations have shown that boys and girls differ in respect to their achievements in school, these differences are not so pronounced as to warrant separate groups for instructional purposes.[1]
2. We might grade children on the basis of chronological age,

[1] Thorndike, E. L., *Educational Psychology* (2d ed.), chap. III; also, Sears, J. B., *Spelling Efficiency in the Schools of Oakland, California.*

but our retardation studies show that chronological age is no index to what children can do in school work.[1]

3. We might use physiological age as a basis, but, while we know that physiological age often does not correspond closely to chronological age, we do not know how closely it corresponds to ability to do school work.[2]
4. We might use psychological age, that is, general intelligence, as a basis, only that this does not tell us what specific preparation a child may have for doing work of a given kind.
5. We might use school examinations, but we know that such tests are untrustworthy.
6. We might use "time in school" as a basis, but tests show that children of the same age, sex, physical conditions, and training vary greatly in the amounts of work they can accomplish in a given time.

So far as possible our basis should be that of ability to do accurately a definite piece of work at a given rate. Precisely what are the elements that together constitute this ability is our real problem.

When children may work together. From this we are reminded that children are unlike in almost every particular. To teach a dozen or twenty children in a group it is of course not necessary that they should be exactly alike. It is only necessary that they be so nearly alike that on a given problem they will all require about the same amount of assistance. It is a question then, first, of what are the traits which determine a child's ability to do a given amount of a given kind of work in a given time; and second, are the individual differences in these traits so pronounced as to make impossible or extremely difficult the grouping of children for purposes of teaching.

Correct bases. In order to settle these questions let us repeat: first, that in their bearing on instruction sex differ-

[1] Ayers, L. P., *Laggards in Our Schools;* also School Survey Reports.

[2] Crampton, C. W., "The Influence of Physiological Age upon Scholarship," in *The Psychological Clinic* (1907), pp. 115–20. See other references at close of chapter.

ences are small; that chronological age does not at all clearly indicate ability to do work; that school examinations are not satisfactory, because they only show what a child knows, and not how rapidly he can do a given piece of work; and that time in school is not a practical basis.[1] Physiological age to a certain extent, and psychological age almost certainly, indicate how difficult work a child can do, and how rapidly he can do it. They fail only to show what previous formal preparation the child may have had for doing the work in question, the extent to which his health and emotional make-up may interfere with his work, and the persistence he will show in carrying out his work.

Individual differences in general intelligence. In view of the fact, then, that it is upon the basis of *intelligence* and *previous training* that we must group the children for instructional purposes, we are concerned here with a quantitative statement of the individual differences among children in respect to physiological and psychological age, and in respect to previous preparation for a given piece of work. If we had eight hundred children to grade the best method would be to determine, first, their general intelligence, perhaps by physiological, and certainly by psychological tests, and second, their previous preparation by educational tests.

The accompanying diagram shows the distribution of 905 unselected children, five to fourteen years old, with respect to general intelligence. This distribution is based upon the Stanford revision of the Binet-Simon tests for measuring general intelligence.[2] The term "intelligence quotient" (I Q) means the ratio of mental age to chronological age. A mentally normal child has an I Q of approximately 100.

[1] For data touching many of these points, see Dickson, Virgil E., *Mental Tests and the Classroom Teacher*, chaps. 2, 5, 6.

[2] For a full explanation of the scale and its use the reader is referred to *The Measurement of Intelligence*, by Dr. Lewis M. Terman. (Houghton Mifflin Company, Boston.)

If, however, an eight-year-old child tests as ten years old mentally, then his I Q would not be 100 but 125, or 25 above the normal. A study of this figure shows that these 905 children range in I Q's from 56 to 145; that is, from very low to very high mentality.

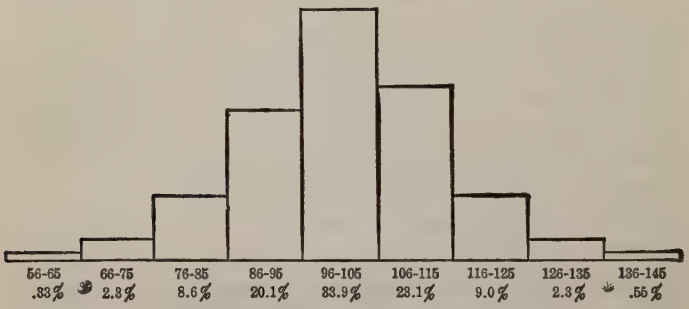

FIG. 2. THE DISTRIBUTION OF INTELLIGENCE

Showing distribution of I Q's of 905 unselected children 5–14 years of age. From Terman's *The Measurement of Intelligence.*

The distribution of intelligence. This diagram gives, perhaps, as true a description of the range of intelligence among elementary-school children as can be given to date, and we should note the following facts which this diagram brings out: first, that about one third of the children tested are normal (96–105); second, that almost exactly as many are above as below normal; third, that the distribution of those above normal corresponds closely to the distribution of those below normal. That is, the .33 per cent who have I Q's between 56 and 65 are offset by the .55 per cent at the upper extreme with I Q's between 136 and 145, and so with the other groups. Certainly the child at the upper extreme can work at an incomparably faster rate in school subjects, or at anything else, than can the child at the lower extreme.

For any scheme of grading or promotion whatsoever this

distribution of human intelligence is fundamental fact number one.

How these differences show themselves. The next question is, how do these individual differences in intelligence reveal themselves in the educational output of a group of children who have worked together on a given subject for a given length of time. This can be answered best in terms of the results shown by giving some standardized educational test. For this purpose the following diagram, representing the scores attained by 416 sixth-grade children in a test in addition, is presented. Presumably these children had had approximately equal training in addition, and yet twelve of them failed to complete one problem correctly, while two others completed eighteen correctly. Just as many worked less as worked more than six problems.

It is obvious that these children have worked with widely different degrees of effectiveness during their first six years in school. That is, assuming that all started equal in their knowledge of addition, we find these differences at the end of six years. The most satisfactory explanation for these differences in adding ability is difference in mentality. These mental differences were there to begin with, but in grading the children they were ignored. Simply because the children all entered at the same time, and were about the same age, it was assumed that they could all work together. This diagram proves that that was a false assumption. The result is that about one fourth of the group is wasting its opportunity trying to do something it cannot do, while another fourth is doing the same, since, not having to work to keep up with the class, the pupils are developing habits of inattention, indifference, and laziness.

In order to show that it is not a mere guess as to whether mental ability explains such a display of results as this, let us examine some actual cases. For this purpose two

tables are introduced, one for first-grade pupils, and the other for high-school pupils.

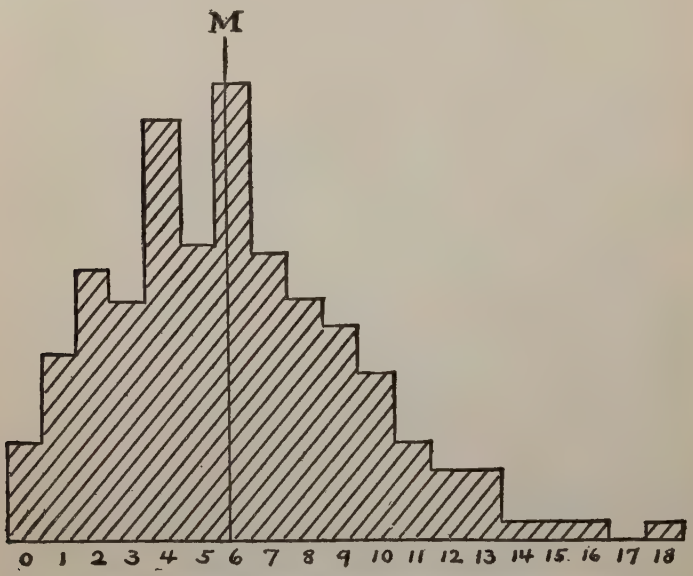

FIG. 3. DISTRIBUTION OF WORK DONE IN ADDITION
Showing the distribution of 416 sixth-grade children in Courtis addition test. M = number of examples completed by median child.

In the first is shown the mental ages of one hundred and forty-nine first-grade pupils, and with this their teachers' judgments of the quality of their school work. From these figures it is very clear that high mental age counts in quality of work. These pupils are roughly of the same chronological age, but vary as to mental age. With this variation in mental age it is easy to see a corresponding variation in the quality of the work they are able to do in school.

In our second table we have a somewhat similar story for one hundred and thirty-one high-school pupils. Here we

TABLE I. MENTAL AGES AND QUALITY OF SCHOOL WORK

(149 first-grade pupils) [1]

MENTAL AGES	QUALITY OF SCHOOL WORK					
	Very inferior	Inferior	Average	Superior	Very superior	Total
9–6 — up					3	3
9–0 to 9– 5						..
8–6 to 8–11				1	1	2
8–0 to 8– 5		1		1	2	4
7–6 to 7–11			5	1		6
7–0 to 7– 5		6	10	7	3	26
6–6 to 6–11		9	18	3		30
6–0 to 6– 5		6	14	1		21
5–6 to 5–11	3	7	7			17
5–0 to 5– 5	4	6	4			14
4–6 to 4–11	8	7	2			17
— to 4– 5	7	2				9
Total	22	44	60	14	9	149

[1] Data from Dickson, Virgil E., *Mental Tests and the Classroom Teacher*. Copyright, 1923, by World Book Company, publishers, Yonkers-on-Hudson, New York.

see not only a decline in the average high-school mark that corresponds to the decline in the intelligence quotient, but we see further that the brighter the child the more likely he was to go through high school and on to college.

These tables present facts that are typical of those being brought to light everywhere throughout the country as we study the influence of intelligence on school progress. It is obvious that if this one factor counts so much in success, then it must be an important part not only of the basis of grading and classification of children, but on keeping children properly graded and classified as well.

Teacher must understand scientific tests. From these facts it becomes obvious that a system of grading, to be effective, must give careful consideration to two things: first, native intelligence; and second, previous training. To

TABLE II. RELATION OF SCHOOL SUCCESS TO BINET INTELLIGENCE QUOTIENT

(131 High-School Pupils, tested in 1916–17, and followed up for six and seven years) *

INTELLIGENCE QUOTIENT ON STANFORD BINET SCALE	NO. OF CASES IN EACH GROUP	AVE. H.S. MARKS (per cent)	COMPLETED 4 YR. H.S. COURSES		ENTERED HIGHER INSTITUTIONS		LEFT H.S. TO GO TO WORK	
			No.	Per cent	No.	Per cent	No.	Per cent
125 or over..... (Very superior)	19	87	19	100.0	18	95.0	0	0.0
115–124..... (Superior)	27	85	26	96.0	22	82.0	1	4.0
105–114..... (Above average)	24	82	20	83.0	13	54.0	4	17.0
95–104..... (Average)	36	78	27	75.0	10	28.0	9	25.0
85–94 ..... (Below average)	22	75	9	40.0	4	18.0	13	60.0
75–84 ..... (Dull)	3	71	0	0.0	0	0.0	3	100.0
Totals.....	131	81	101	77.0	67	51.0	30	23.0

Median I Q's dropped out, 94; graduated high school, 111; in college, 118.

* Data from Proctor, Wm. M., *Vocational and Educational Guidance*, Table II. Houghton Mifflin Company.

determine these the teacher and principal need a working knowledge of two sets of educational tools, namely, scales for measuring intelligence,[1] and tests or scales for measuring knowledge and skill.[2] The child's health, his physiological age, and his size and chronological age to a limited extent, as well as examinations and the teacher's judgment, will

[1] Terman, L. M., *The Measurement of Intelligence.* (Houghton Mifflin Company.) The most useful book for intelligence testing.

[2] Monroe, De Voss, and Kelly, *Educational Tests and Measurements.* McCall, Wm. A., *How to Measure in Education;* Monroe, W. S., *Measuring the Results of Teaching,* and *The Theory of Educational Measurements;* Kelley, T. L., *Interpretations of Educational Measurements,* and Dickson, Virgil E., *Mental Tests and the Classroom Teacher,* will be useful books on this subject.

also enter as modifying factors in difficult cases, but intelligence and previous training are basic and fundamental.

4. Difficulties in applying these principles

Difficulties stated. It is easy to say that children should be graded and promoted on the basis of their abilities to do work of a certain degree of difficulty, but there are many practical difficulties to be overcome in carrying out this dictum. When school opens in the autumn, twenty or fifty pupils, five to seven years old, enter for the first time. If we measured them for intelligence we should find them distributed very much as in Fig. 2, page 146, though probably without showing the lower extreme. If we measured them for knowledge of subjects to be studied let us assume that we should find them all equal, or nearly so. Now how shall we apply these two facts in grading such a group? Certainly they must all begin at the same place in their studies, namely, at the beginning.

Practical solution. Then they may as well begin together in a single class, or in two classes if there are more than forty. Our problem is, how to provide for the different rates of progress which our intelligence test indicates as possible for the different children? It is not reasonable to expect the child with an I Q of 80 to keep pace with the child whose I Q is 130. It is necessary, therefore, that practically from the start the class should be divided into three groups, with those whose I Q's are below 95 in one group, those whose I Q's are 95 to 106 in another, and those whose I Q's are above 106 in a third. According to Fig. 2, this would divide them almost equally into three groups. Any one teacher can handle three such groups far more effectively than she can handle them as one group.

Teacher's judgment not trustworthy. To show that this is practically possible we have only to add that it is pre-

cisely what is being done now in most of our city schools, with the exception that intelligence is often determined, not by adequate psychological tests, but by the teacher's judgment alone. To show that the teacher's judgment, though an indispensable factor always, is often erroneous, we have only to cite the results of careful investigations of this question.[1] These studies show that the bright children, though accelerated for their chronological age, are almost always retarded for their mental age. This means that the teacher (or the grading and promotion machinery) did not let the bright pupils go as fast as they were capable of going. Just the opposite of this is found to be true of children of low mentality.[2]

The point is that the teacher is too often satisfied with John's leading his class, when the fact is he ought to be leading the next class above. It is merely one more point at which ox-cart methods in school work must give place to the more refined methods of science.

The principle applies in ungraded school. But here we have assumed that the entering class would have the entire attention of one teacher, whereas, save in large schools, this is not possible. Probably at least two thirds of all the children in the United States do not enter school under such conditions. Instead they enter rooms containing from two to eight full grades, and it is in such places that the formation of these special divisions of each grade is difficult or impossible, for in addition to the differences in native intelligence, there will necessarily be great variations in age,

[1] Dr. Terman has shown that teachers almost invariably overestimate the intelligence of children of low mentality, and that they underestimate that of children of high mentality. See his *Measurement of Intelligence*, chap. III. These findings are clearly borne out by the results of recent educational tests.

[2] Hoke, K. J., *Placement of Children in the Elementary Grades.* U.S. Bureau of Education, Bul. (1916), No. 3.

size, and previous training. Instruction under such circumstances is of course difficult, but it can be made more effective if the teacher knows the kind of intelligence she has to work with. She can then add library and report work to the assignments of the brighter pupils, and ease up the load on those not so bright. We might say that the more widely her children vary in intelligence and in previous training the more individualistic her instruction must be made.

5. Flexibility the essential element

Need for frequent reclassification. In any system of grading flexibility is the essential element demanded by the facts we have pointed out above. If children vary in intelligence, as we have already shown, and can consequently work at different rates of speed, the system of grading must make possible a frequent reclassification in order that those who are capable may not be held back by the slower pupils, and in order that the slower pupils may not be overworked or discouraged. Numerous systems, varying from no elasticity to extreme individual instruction, have been devised to meet these demands.

Two ways of obtaining flexibility. There are two possible methods by which such flexibility may be provided. One is to have a single course of study for all and correct inequalities by regrouping or promoting at frequent intervals, pushing the bright pupils ahead and the extremely slow ones back. The other is to have two or more courses of study, differing in the amount of supplementary work to be done in addition to covering a certain minimum common to each. The difference between these two plans is obvious. In the one all children who complete the eight grades will have covered the same ground, some in six years, perhaps, others in seven, eight, nine, or even ten. Some will therefore be

twelve, others sixteen years old, when they are ready to enter the high school. By the other plan, if it is carried out to its logical limits, all are the same age, that is fourteen, when they finish the elementary school, and all alike have

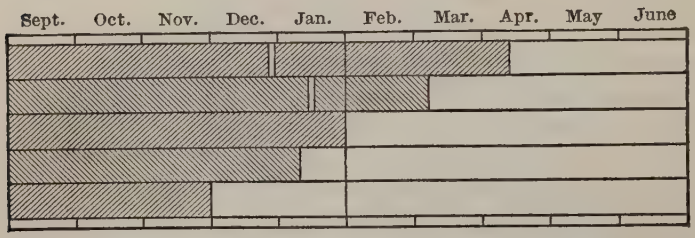

FIG. 4. GROUP PROGRESS WITH A COURSE OF STUDY
The five different groups made different rates of progress during the half-year shown here. From Cubberley's *Public School Administration.*

covered the essential facts and principles in the course of study, but in addition to this the brighter pupils have enriched this common core of learning with much supplementary work.

The single-course plan. The working of the two plans will be made clearer by the following diagrams. Let us suppose that the course of study for the elementary school is divided into eight equal parts, each part representing the work of one year, and that each year's work is divided into ten sections, each representing a month's work. The vertical bar in Fig. 4 will represent the end of a half-year's work. Let us imagine a class of thirty pupils starting together on this half-year's work, beginning at the left end of the figure. If they are all equal in intelligence, previous preparation, and health they will keep together and will arrive at the right end of the figure at the end of the year. They are not equal in these respects, however, and so in a few weeks some are ahead of the class, while others are behind. At the end of the half-year we find about four or five

pupils who have completed the half-year's work. We find another small number who have completed only about three sections of the half-year's work. If these thirty pupils

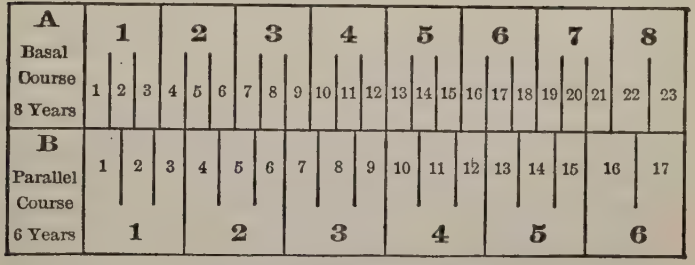

FIG. 5. THE CAMBRIDGE PLAN

Two parallel elementary-school courses, with one third more work assigned for each year in Course B than in Course A. Pupils may transfer from one course to another at five points without loss. From Cubberley's *Public School Administration.*

move at these rates year after year we see that some will finish the elementary school in a little over six years, and others in little short of ten years, but all will have covered the same ground.

Instead of promoting at the end of each month, as is suggested by Fig. 4, the so-called Cambridge plan for grading and promotion, as shown in Fig. 5, attempts to meet these needs by having a six-years course and an eight-years course side by side. A bright pupil may thus finish the eight-years course in six years, while a slow pupil may use the full eight years. It is also possible to switch from the fast to the slow course, or *vice versa*, if such an adjustment is thought profitable. This is but one of numerous variations of the short-promotion idea.

The multiple-course plan. In the other plan the correction of this unevenness in the class is accomplished only in part by redistributing the children, that is by promotions, the main plan being to provide the brighter pupils with ad-

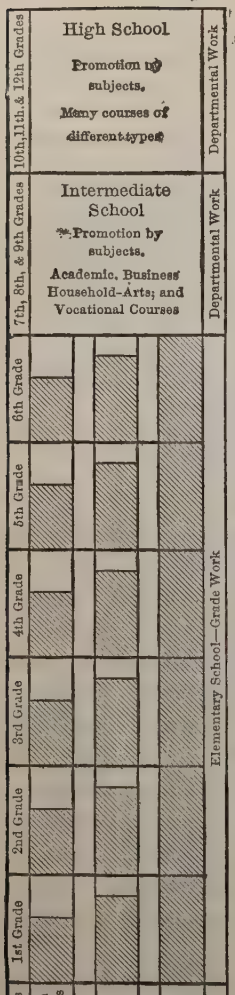

FIG. 6. THE DIFFERENTIATED-COURSE PLAN

Showing the plan as followed at Santa Barbara, California. From Cubberley's *Public School Administration.*

ditional work. Here the course of study may be represented by grades or years, as in Fig. 6. Let the gray portions of bar C represent the work by years. The middle bar, B, will include the work represented by the C divisions and also a certain amount of additional or supplementary work, involving application of principles in a practical way, and more details. Bar A will include the work represented by the other two bars, with still more work added. Upon entering school the class begins the work of the middle division, but very soon must be divided into sections A, B, and C, including respectively the superior, the average, and the slow pupils. The teacher will then carry the three groups forward, and as occasion demands she will move a child from one of these sections to another till the pupil finds the proper amount of work necessary to occupy his full time. This sort of shifting will take care of readjustments or promotions for some time, continue to keep the pupils together as a group, and so permit them to remain longer with one teacher. For rural

schools it probably represents the best grading and promoting plan. In time, however, a few of the pupils of group A will be able to take up the work of section C in the next year above, at which time such pupils may be transferred from section A to section C of the next year above, as shown in Fig. 6. Similarly a little later group B, and at the end of the year group C, will move to the next year's work.

Results under the multiple-course plan. Where this plan was tried, at Santa Barbara, California,[1] it was found that about 10 per cent of the children could not do more in one year than the minimum amount of work, as represented by division C; that 23 per cent did the work represented by division B; that 44 per cent did that represented by division A; and that 8 per cent did that represented by A, plus that represented by C in the next year above; and that 14 per cent did even more than this.

The important feature of both these plans of promotion is that they are thoroughly elastic. They provide as nearly as possible for every child, whatever may be his capacity for work, and yet no child works alone. He is always in a class, competing and coöperating with others, and so discovering his own strength and weakness. These two plans, with numerous variations and combinations, represent the best that has been achieved by the movement against the old "lockstep" method of yearly promotions, and with the rapid development of scientific tests for determining a child's ability there is reason to hope that a system will soon be evolved which will unite all the advantages of individual instruction with those to be obtained by group work.

[1] For full description of results of its use see Burk, C. F., "Promotion of Bright and Slow Children"; in *Educational Review*, vol. 19, pp. 296–302 (March, 1900).

6. Promotion by grades and by subjects

The old annual grade promotion plan. The system of promotions, which Dr. Wm. T. Harris attacked in 1869 to 1874 in his annual reports as superintendent of schools in St. Louis, provided but one chance a year for promotion, and if a child failed in one subject, especially if that subject happened to be arithmetic, he was forced to repeat the entire work of the year, regardless of the need for such repetition in other than the one subject in which he failed.

Our recent studies of school costs and of individual differences show how ridiculous this is, yet in many schools we are still making promotions upon exactly this basis. In the high school and in the college we have outgrown this practice. If a student in these schools who carries five studies happens to fail in one of the five, he must repeat that one subject but not the other four. The result is that in four of his subjects the student retains his interest, and also his prestige with his fellow students, whereas under the old plan he would have been compelled to drop back with another class younger than himself and waste his time for a year going over work already familiar to him.

How to overcome these evils. The elementary school is beginning to realize what such a system means to the child in lost opportunity, and efforts are being made to meet the issue by various forms of reorganization.[1] With our more elastic plans of promotion the loss from failure is correspondingly less in quantity, but remains identical in other respects. The fact that children pass in four studies and fail in one or two may be due to wrong emphasis in teaching method, or in the organization of subject-matter, or in time distribution; or it may be due to the child's lack of interest in certain of his studies. Certainly we need standards in all

[1] See especially chapter XVIII of Cubberley's *Public School Administration*. (Houghton Mifflin Company, Boston. 1916.)

these matters, but this lack should not interfere, and has not interfered, with other attempts at solution.

In addition to the types of flexibility in grading outlined above, three plans have been devised for overcoming this weakness.

First, to each room is added an *extra teacher* whose business it is to supervise the children's study, giving special help to the slow pupils, and to any who are behind in a given subject. This plan, as worked out at Batavia, New York — known as the "Batavia System" — is a combination of class and individual instruction which is designed to keep the backward pupils up with their classes by means of special individual help.[1]

Second, the *ungraded room* has been provided, when the school is large enough. Under this plan a room is set apart as a sort of teaching hospital, to which any teacher may send a child for special work in any subject. As soon as he has caught up with his class he may resume his work with his regular teacher. Such rooms are used to receive either slow or bright children. If a pupil is almost ready to skip a grade he is sent here for special work which will lead up to the work in the grade above.

The third plan is that of promotion by subjects. In the elementary school this plan is yet in its infancy, but where it has been tried out there is every evidence that it can be accomplished exactly as it is accomplished in the high school and college.[2] More experiments are needed, however, in order to guarantee its practicability.

[1] For an explanation of the system and its merits, see "The Need of Individual Instruction," by J. Kennedy, in *Proceedings of the National Education Association* (1901), p. 295.

[2] See Search, P. W., *An Ideal School* (D. Appleton & Co., New York); and "The Pueblo Plan," in *Educational Review*, vol. VII, pp. 154–70 (February, 1894). Also *Individual Instruction*, Compiled by Frederick Burk, President, San Francisco State Normal School. This bulletin is a

7. *Keeping the children adjusted*

Readjustment a continuous need. Even though we may work out plans for keeping the children moving, each at his own best rate, we find that many children are not where they belong. Over and over we find, too, that it is more often the bright child who is behind where he belongs. In other words, even with a thoroughly sensitive grading system we do not keep the children properly graded. The reason is that it requires work to operate even a good machine. We naturally cling to things as they are, and we do not disturb a child's position in his grade until it is so unsatisfactory as to cause disturbance. If a child fails, we notice it; if he gets very far ahead of his class, he usually falls into mischief, and then we look for the reason. Our grading system may have been sufficiently elastic to have forestalled such crises, with their attendant waste and sadness, had we detected the misadjustments and reclassified the children.

This means that along with a grasp of the principles and plans of grading, a teacher must understand how to detect a need for using the system to keep her pupils moving at their own best rates.

Knowing her pupils. At the outset of the year a teacher should make a thorough study of all her pupils. For this every record should be followed back to the time each child entered school. The nature of this record is very important as a basis for judging how to instruct the child. Such facts as the following are important:

study of the data of two years' experience with the individual system in the training school. In this connection the reader will do well to read of the various experimental efforts to rid instruction of the influence of rigid machine control. For instance: Dewey, *Schools of Tomorrow;* Hamaide, Amelie, *The Decrole Class: A Contributor to Elementary Education.* See especially the many brief descriptions of experimental schools presented in *The Twenty-Sixth Yearbook of the National Society for the Study of Education.* (1926.)

1. How old was the child when he entered?
2. Has he failed at any time, and if so:
3. In what subjects did he fail?
4. How many times and in what years did he fail?
5. Has he skipped a grade at any time, and if so:
6. What grade and at what age?
7. What are his mental age and I Q?
8. What is his chronological age?
9. Has he shown special interest or ability in any particular subject or line?
10. What is his record as to matters of discipline?
11. Has he been studious or not?
12. Is he over, under, or at age for his grade?
13. What has been his scholastic record?
14. Has he been regular in attendance?

If at the beginning of the year the teacher would prepare a form, with the children's names on the left and these fourteen items across the top, and fill it out from the records, she would have an excellent introduction to her class. She might want to add to these fourteen items others about the child's home life, nationality, play interests, travel experiences, home duties, and interest in books, people, machinery, animals, and plants. The more the teacher knows at the outset the more likely she will be to detect any misadjustment in the child's grading, and the better basis she will have for forming a judgment as to how to reclassify him.

Detecting and measuring misadjustments. In most schools the teacher will find some children who are *retarded*, or have fallen behind their grade, and others who have skipped some work and so are *accelerated*, or ahead of their grade. There are standard ways of measuring and describing these misadjustments, and with these the teacher should be familiar.

The standards that are commonly accepted are as follows:

TABLE III. AGE-GRADE NORMS FOR THE BEGINNING AND END OF EACH HALF SCHOOL YEAR

GRADE	NORMAL AGES OF PUPILS AT			
	BEGINNING OF		END OF	
	First Half (years and months)	Second Half (years and months)	First Half (years and months)	Second Half (years and months)
I.....	5-9 to 6-3	6-3 to 6-9	6-3 to 6-9	6-9 to 7-3
II.....	6-9 to 7-3	7-3 to 7-9	7-3 to 7-9	7-9 to 8-3
III.....	7-9 to 8-3	8-3 to 8-9	8-3 to 8-9	8-9 to 9-3
IV.....	8-9 to 9-3	9-3 to 9-9	9-3 to 9-9	9-9 to 10-3
V.....	9-9 to 10-3	10-3 to 10-9	10-3 to 10-9	10-9 to 11-3
VI.....	10-9 to 11-3	11-3 to 11-9	11-3 to 11-9	11-9 to 12-3
VII.....	11-9 to 12-3	12-3 to 12-9	12-3 to 12-9	12-9 to 13-3
VIII.....	12-9 to 13-3	13-3 to 13-9	13-3 to 13-9	13-9 to 14-3
IX.....	13-9 to 14-3	14-3 to 14-9	14-3 to 14-9	14-9 to 15-3
X.....	14-9 to 15-3	15-3 to 15-9	15-3 to 15-9	15-9 to 16-3
XI.....	15-9 to 16-3	16-3 to 16-9	16-3 to 16-9	16-9 to 17-3
XII.....	16-9 to 17-3	17-3 to 17-9	17-3 to 17-9	17-9 to 18-3

Normally a child will enter grade I B somewhere between the ages of 5 years and 9 months and 6 years and 3 months, and complete the grade between the ages of 6 years and 3 months and 6 years and 9 months, and so on for the other grades.

These are the norms against which we judge whether a child is where he should be for his age.

Age-grade position. This proposal to check a pupil's position against his mental age suggests that we are much interested in knowing whether a child is progressing at the proper rate. Methods for obtaining both these facts — age-grade position, and rate of progress — may be suggested by the illustration given in Table IV, which shows where a child from any one of the various age-groups is located. By this table we see that of the 24 pupils who are between 5 years and 9 months and 6 years and 3 months of age, 21 are just entering a school, 2 are in the upper half of grade I, and 1 is entering grade II B. So we may read for any age group.

Rate of progress. At the bottom of Table IV, we find that of the 35 pupils in grade I B, 21 are normal (in position) and 14 are retarded. Of the 35 in grade I A, 2 are accelerated, 19 are normal, and 14 are retarded. These figures are expressed in percentages in the lower lines of the table.

TABLE IV. AGE-GRADE DATA FOR BEGINNING OF YEAR

AGE IN YEARS AND MONTHS	GRADE I		GRADE II		GRADE III		GRADE IV		GRADE V
	B	A	B	A	B	A	B	A	B
5-9 to 6-3....	21	2	1						
6-3 to 6-9....	9	19	3	1					
6-9 to 7-3....	4	9	24	2		1			
7-3 to 7-9....	1	6	2	27	1	2	1		
7-9 to 8-3....		1	3	3	22	3	3	1	
8-3 to 8-9....			2	1	6	20	1	1	
8-9 to 9-3....				1	1	7	25	1	2
9-3 to 9-9....					3	1	2	24	3
9-9 to 10-3....					2	1	1	3	24
10-3 to 10-9....							2	2	2
10-9 to 11-3....								1	2
11-3 to 11-9....								2	1
11-9 to 12-3....									1
Accelerated.....		2	4	3	1	6	5	3	5
normal.....	21	19	24	27	22	20	25	24	24
retarded.....	14	14	7	5	12	9	5	8	6
Totals....	35	35	35	35	35	35	35	35	35
Accelerated.....	0	6	11	9	3	17	14	9	14
Per cent normal.	60	54	69	77	63	57	72	69	69
Per cent retarded	40	40	20	14	34	26	14	22	17

This table gives us a picture of where the children are but gives us no notion of how they came to be there. Those in the squares are where they belong, for their ages, but many are obviously older than they should be for their positions. In order to do something about this we need to know why these pupils are ahead of and behind where they belong.

A useful step will have been taken if we prepare a second table similar to this one except:

For column one change the heading to read "Years in school," instead of "Age in years and months."
In place of the figures 5–9 to 6–3 insert "less than ½." In place of 6–3 to 6–9 insert "½," and so for the following figures, advancing ½ year at a time.
In place of "accelerated" write "rapid progress."
In place of "normal" write "normal progress."
In place of "retarded" write "slow progress."
Make corresponding changes in the per cent tables following.

With our table revised we would then read that of the 24 children in line 1: none have made "slow progress," 21 have made "normal progress," and 3 have made "rapid progress." A study of this table as thus revised would show which of the children have traveled slowly, which normally, and which rapidly in their school work.

While these two tables would show us where each child of any given age is located and the rate at which he has progressed, it would not tell us why he has moved at this rate. To find this out we shall have to inquire as to his health, attendance record, application or effort, mental age, I Q, and previous scholastic record, since all of these are possible sources to which we may look for an explanation.

The teacher's interest in these measures. To the superintendent such mass figures as are suggested by these tables have definite value. He must see his school system as a whole. For the teacher, however, the mass picture must

be studied in detail. For her the question is: Where in this table is John, or Mary? Why is John here, and should he be elsewhere in the table? If he is not where he ought to be as judged by all the facts suggested above, then she has found her real problem, the problem of reclassification.

The procedure is not simple. Classifying children is not a mere matter of watching the calendar. It is much more than this. The task is to receive a child at the beginning of his school career, put him where his natural talent seems to warrant, and then keep him in a position in the grades where he will best use his talents. However we may choose to do it we must not let him get out of adjustment.

This must apply not merely to his study courses combined, but to each of his courses in particular. It will very often bring up the question of subject promotion, and of irregular promotion; and these needs will provide the teacher's real opportunity for rendering professional rather than routine service.

For this, however, the teacher must master the technique that has been suggested in this chapter. She will not have the opportunity, probably, to develop a new type of grading scheme, but she will have ample use for a thorough understanding of the principles upon which such systems are devised. She must know how to study her pupils individually as well as a class, how to assemble and record proper facts about them, how to read and interpret past records, how to give tests, how to study progress, and how to reach a decision as to what to do when reclassification is needed.

8. Chapter summary

The object here has been to examine the principles involved in the classification and promotion of children, on the assumption that group instruction is not only necessary for economic reasons but is profitable for educational reasons.

A perfect system of grading and promotion must combine the

beneficial features of group instruction with those of individual instruction and as far as possible avoid the evils of each. This can only be done by making the organization flexible enough to meet the individual demands of human nature, which we know to be extremely varied.

Investigations of individual differences, and of the results of school work, tend to show that sex, age, length of time in school, examinations, and the teacher's judgment do not form satisfactory bases upon which to determine promotion, but that general intelligence and previous training are fundamental.

To meet the demands of individual differences two types of flexibility in grading have been devised. One has a single course of study with frequent promotion periods, the other has a variable course of study which cares for most of the necessary adjustments, frequent promotions playing only a secondary part. Numerous combinations and variations of these two plans have been used to good effect.

Even with such flexible plans it is found that children are frequently held back by the fact that they fail in one subject. To remedy this, three plans have been devised: first, the Batavia plan, of providing each room with a special teacher for backward pupils; second, the ungraded room, to which children may be sent for special help; and third, promotion by subjects. All these have been tried out with excellent results.

Whatever system may be devised for the organization of children into teaching groups it will be the teacher's business to conduct her room on that basis. With the very best system possible to devise there will be many misadjustments. The technique for the study of these every teacher must master and use from day to day. The teacher should therefore familiarize herself not only with the principles of grading and promotions, and with every detail of the particular system under which she is to teach, but also with the methods for studying retardation and acceleration. To this equipment she must add a working knowledge of the best psychological and educational tests of intelligence, knowledge, and skill, and train herself to detect quickly the degree of effectiveness with which her plans are serving each individual child.

QUESTIONS FOR DISCUSSION

1. What are the advantages and disadvantages of group instruction? Of individual instruction?
2. What are the practical difficulties in the way of each?
3. How is the problem of grading connected with the problem of curriculum making, and with that of promotions?
4. Enumerate all the possible bases for grading children. Why is sex not an important basis? What is the difference between chronological and psychological age? What is meant by physiological age, and what connection is it thought to have with intelligence?
5. What evidence have we that the teacher's judgment is not an adequate basis for determining promotions?
6. Upon what basis should grading and promotion be determined? What is meant by intelligence quotient (I Q)?
7. How can we measure intelligence, and what is the best way to measure the amount and kind of knowledge and skill a child possesses?
8. How do children vary with respect to intelligence and how do these variations reveal themselves in the results of study?
9. What are some of the practical difficulties in the way of applying these tests as bases of promotion?
10. What is meant by flexibility in grading children? Describe the two plans suggested for providing such flexibility. What improvement do these schemes afford over the old method of annual promotions?
11. Suppose a child had done passing work in all his classes except arithmetic; would you have him repeat all the work of that grade? If so, what do you think the actual educational, social, and moral consequences would be for the child? If not, what usable plans have been devised for permitting him to continue in all his studies and still review his work in arithmetic?
12. What difficulties do you see in the way of individual promotions by subject?
13. How can the rural teacher overcome some of the obstacles to grading her pupils according to plans suggested above?
14. Why does a teacher need to know something about individual differences, methods for measuring general intelligence, educational tests, the principles involved in grading and promotion, and the practical plans for carrying out those principles?
15. Suppose in your class you had one pupil who was fair in all his classes except reading, and excellent in that. What would you do? Suppose by the beginning of the last month of school he had brought all his studies up except history, what would you do?

PROBLEMS FOR STUDY

1. Collect the following facts for a group of fifty pupils now in school, who have failed (at least once) to be promoted.
   a. How much actual time was lost?
   b. Did the pupil do superior, average, or inferior work when repeating?
   c. Was he noticeably disheartened by his failure?
   d. In repeating his studies, was the field different or broader than that covered the first time?
   e. In what subjects was repeating really unnecessary?
   f. Sum up the real meaning of these failures: to the child, to the school.
2. Make a corresponding study of pupils who have received extra or double promotions, securing the facts as to:
   a. How much subject-matter was skipped
   b. How much time was gained
   c. Whether the quality of work was lowered
   d. Whether the application to work was affected
   e. Whether the effect of skipping varied with different subjects
   f. Whether the skipped work was made up
   g. Sum up the real meaning of these cases of rapid progress.
3. From recent numbers of the *Journal of Educational Research* and the *Journal of Educational Psychology* collect figures to show how wide is the variation in scores made in achievement tests by the pupils of a given grade.

   In the light of these facts consider the problem of grade standards and the problem of giving instruction to a class with the amounts of variations in the knowledge and skills tested as shown.
4. Collect evidence for a number of cases showing the value of probationary promotions, of segregation of very dull pupils, of special individual help in maintaining promotion, and of extra assignments to bright pupils.

REFERENCES FOR ADDITIONAL READING

Berry, Chas. S. "Classification by Mental Tests"; in *Journal of Educational Research*," vol. VI, p. 185. (Oct., 1922.)

Buckingham, Burdette Ross. *Research for Teachers*, chap. VII. New York, Silver, Burdett & Co., 1926.

Buckingham, B. R., and others. *The Classification of Pupils in Elementary Schools*. State Department of Education, Columbus, Ohio, 1926.

Callihan, John C. "An Experiment in Grouping"; in *Elementary School Journal*, vol. 21, p. 465.

Cubberley, E. P. *The Principal and His School.* Boston, Houghton Mifflin Co., 1923.

Dickson, Virgil E. *Mental Tests and the Classroom Teacher.* Yonkers, New York, The World Book Co., 1923.

Glass, James M. "Classification of Pupils in Ability Groups"; in *School Review*, vol. 28, p. 495. (Sept., 1920.)

Holmes, W. H. *School Organization and the Individual Child*, pp. 11–86. Worcester, Mass., The Davis Press, 1912.

McCall, Wm. *How to Measure in Education.* New York, The Macmillan Co., 1922.

Monroe, De Voss, and Kelly. *Educational Tests and Measurements.* Boston, Houghton Mifflin Co., 1925.

Moyer, Edward L. "A Study of the Effects of Classification by Intelligence Tests"; in *Twenty-Third Yearbook of the National Society for the Study of Education*, p. 337.

National Society for the Study of Education, *Twenty-First Yearbook*, parts I and II; *Twenty-Fourth Yearbook*, part II.

Ryan, Heber Hinds, and Crecelius, Philipine. *Ability-Grouping in the Junior High School.* New York, Harcourt, Brace and Company, 1927. A useful book in this field and has extensive bibliography.

Terman, Lewis M. *Measurement of Intelligence.* Boston, Houghton Mifflin Co., 1916.

Terman, Dickson, Fernald, *et al.* *Mental Tests and Reorganization.* Yonkers, New York, The World Book Co.

Trabue, M. R. "Some Pitfalls in the Administrative Use of Tests"; in *Journal of Educational Research*, vol. VI, p. 1; *op. cit.*, Varner, p. 126. (June, 1922.)

CHAPTER XI

THE SCHOOL CURRICULUM

Outline of Chapter

1. What a curriculum is: Curriculum to supplement world experience — Two essential viewpoints — Each study a means to a special end — The changing nature of the curriculum — Why "fads" and "frills" in the curriculum.
2. The teacher's interpretation of the curriculum: The curriculum as a body of knowledge — The curriculum as a body of experience — The two viewpoints contrasted.
3. Socializing and motivating the curriculum: Meaning of socialized subject-matter — How to socialize the curriculum — Examples in socialization of studies — The teacher's responsibility — How to gather these materials.
4. Types of subject-matter: Form and content studies — Form and content inseparable — Poor teaching results from too great separation of the two — Double character of all studies.
5. The tendency in curriculum-making: Changing conceptions of education — Current view of curriculum revision — Organizing the studies — New experiments — The teacher and curriculum revision — The problem as a whole.
6. Summary — Questions — Problems — References.

1. What a curriculum is

Curriculum to supplement world experience. The term curriculum usually brings to our minds a printed course of study or a collection of textbooks, the one being the directions by which the content of the other is to be administered to the children. We tend to think of the child and of the curriculum as two unrelated objects of concern for the teacher, who assumes it to be her function to bring the two together. We think of the child as coming to school to get knowledge, and of the curriculum as the knowledge which he is to get. So it is that we are likely to set the one over against the other.

If, however, we turn to our definition of education [1] we are reminded that to learn is not merely to master the printed page, to get information, but that it is to develop, to grow, to experience, to live. It follows then in a broad sense that whatever enters to modify the thought or the

[1] See Chapter I.

behavior, that is the learning, of the child, is in so far a part of his larger curriculum of life. Forgetting the narrow work of the school then, for the moment, and remembering that the child is busy learning wherever he is, we see that the world, in so far as he can in any way appropriate it, is his curriculum. The world, too, is not merely pouring into his mind — he is also attacking the world, selecting here and rejecting there. He almost literally carves out his own world, and so his own education.

The school, historically speaking, came in to supplement this larger program and to economize this larger learning process. Consequently the school curriculum is scarcely more than an incident in the sum total of the child's education, and it will be an important incident only if it includes the same wide variety of information and activities that are included in that broader curriculum we call life. All this wider knowledge the school must reduce to order, to the end that the child may learn more rapidly and effectively.

Two essential viewpoints. Two points, then, are to be observed. First, the curriculum must include both knowledge and activities, and these must be drawn from the actual life the child is living, else they cannot supplement his ordinary experiences. Second, this knowledge must be so organized that it will be approachable for the child in the same way that the outside world is approachable. Otherwise the child will not actively select and reject, but will remain passive with respect to it. Similarly, the activities included in the curriculum must be the natural activities of children, otherwise they will not readily engage in or understand them.

A curriculum, then, is not merely a given quantity of information to be memorized and reproduced by the child. If we think of the printed course of study we may call it a set of directions whereby the child will have an oppor-

tunity to give expression to his own best impulses and purposes, and to get possession of the kinds of experience and knowledge that will make it possible for him to understand the past and to enter into the civilization of the present and future. If, on the other hand, we think of what this outline or printed course stands for, we must think of the whole of life — physical, intellectual, social and moral, æsthetic, and economic. Not of mere information about these aspects of life, but of information plus actual experience in them.

Each study a means to a special end. If we examine the different studies with this broader function of the curriculum in mind, we shall see that each study is essentially a means by which the true significance of education and the fundamental aims of the school are to be realized. If we ask what are reading, writing, spelling, and composition, and why are they part of the curriculum, we at once realize that life could scarcely go on without them. They are social instruments or tools which the child must have if he is to have access to the past experiences of the race, or even if he is to take part in ordinary social and business affairs. Arithmetic is scarcely more than a tool in a similar sense. History is taught in order that the child may have some sort of temporal perspective for the part he is to play in society; while geography and civics orient him with respect to place and to present institutional life. If we ask the same questions about gardening, cooking, sewing, all kinds of construction work in paper, leather, wood, and metal; or about singing, dramatization, story-telling, painting, drawing, modeling in clay, plays, and games, as we find them in the elementary school, we must answer that, while for the child these are actual social activities which appeal to his natural impulses, yet from the standpoint of adult society they are not only important experiences, but are introduc-

tory to fundamental occupations without which there could be no community life. When we study language from the standpoint of literature, and drawing and painting from the standpoint of fine art, we are only studying these modes or instruments of expression from the point of view of their æsthetic value, as distinct from that of their technical or industrial value in community life, for which they were originally developed.[1] Thus the curriculum includes behavior quite as much as it includes knowledge, and each is pertinent both to child nature and to adult social needs.

The changing nature of the curriculum. The curriculum is thus a medium through which the child may find his place in the highly institutionalized life about him, living through the various types of experiences which have been and are essential to the development of society. By getting these experiences he comes into possession of the essential social tools, reading, writing, and number; gains a knowledge of the past culture which is so essential to an understanding of the present; and enters into the life of his own time.

With such a function the curriculum cannot remain static. The past extends into the present, the present into the future, and each age has its own tools, customs, knowledge, and ideals, and interprets the past in these terms. With new inventions, with the growth of science and of art, with the enlargement and increasing complexity of community life, the past must be constantly reinterpreted if it is to serve the present and anticipate the future. Thus, at one time the study of history in our schools was largely a study of the military and political past; now, with our industrial development, our history looks more to the economic and social past. Similarly, at one time we studied

[1] For a fuller explanation of these meanings for the different studies see "Course of Study, Theory of," by John Dewey, in Monroe's *Cyclopedia of Education.*

physiology and anatomy from the standpoint of the dominant scientific movement. The point of view in these subjects is now shifting in the direction of personal and social hygiene and sanitation. A few years ago there was no need for music and drawing in the school because frontier life had little time or place for the higher forms of art, but now the world demands them. So the curriculum is ever changing to meet the changing needs of the time.

Why "fads" and "frills" in the curriculum. We need not be surprised, then, that the layman and the antiquated teacher, who have been accustomed to think of the child as a little man and of the curriculum as a body of knowledge, complain of "fads" and "frills" in the curriculum. They think of drawing, manual training, basketry, weaving, sewing, and cooking as superfluous subjects, when in fact they are designed mainly to furnish important social experiences through which the child may grow to a fuller understanding of various occupations which have been basic in the evolution of society. One can think of numerous facts and activities, really essential to a modern curriculum, which would have been entirely meaningless in a monastic school of the fifteenth century, or even in a pioneer rural school a half century ago. The difference is a difference in civilizations. Change, then, is a fundamental characteristic of any curriculum that fulfills its proper purpose.

2. The teacher's interpretation of the curriculum

The above has suggested two widely different points of view from which the curriculum may be interpreted by the teacher. She may think of it purely from the standpoint of so much information to be imparted; or she may think of it from the standpoint of the experience (involving both information and activities) essential to the all-round development of the child.

The curriculum as a body of knowledge. If the former point of view is taken, then the formal side of every study will be stressed. Composition will not mean a study of free and natural expression, but rather of grammatically-correct expression. Each little theme will be written, not eagerly and out of a full experience, but ploddingly, to demonstrate the correct use of capitals, how to make paragraphs, or how to distinguish narration from exposition or description. History will become a study of names, dates, and places, instead of a study of the life of a people. Physiology will be a study of how the teeth are constructed, with emphasis upon remembering the words mastication, enamel, and dentine, rather than upon why the teeth should be kept clean and upon actual practice in keeping them clean. Discipline will come to mean keeping the children quiet, morals and manners will be taught by preaching and scolding, and play will have no part in school work. It will be the intellectual alone that is stressed, with the greatest emphasis upon the memory aspect of intelligence and the least upon observation, reason, and imagination. The curriculum will become an end instead of a means, and the teacher a slave to the printed course of study.

The curriculum as a body of experience. If, on the other hand, the development idea should dominate, then the teacher will watch the child more and the printed directions about the number of pages to be covered less. Training of memory will not exclude training in observation, judgment, will, imagination, and expression. It will be the whole mental life, and not one single part of it, that will be trained. Nor will the physical, social, and æsthetic sides of the child's life be neglected. Play will become a fundamental part of social and physical training. Through basketry, weaving, sewing, modeling, and gardening, the child will gradually be led into the essential processes of

civilized society. He will not merely read about agriculture, or be told what it means, but through planting and tilling and harvesting in the school garden he will discover man's real relationship to the soil. He will not merely read of the great cotton and woolen industries, but through weaving he will experience something of their meaning. Reading will not be correct pronunciation alone; it will be thought getting and expression. The curriculum will not provide merely for a few lessons on digestion, but through cooking and a study of foods and how to care for them, through washing dishes and serving meals, it will bring the knowledge of digestion to bear upon the practical problems of health and development. Civics will not be studied so much from books as from streets, offices, industries, and public places. The curriculum will not be an end, but only a means. It will not be all-inclusive, it will only serve to point the way.

The two viewpoints contrasted. In the one case the curriculum is viewed solely from the standpoint of that knowledge which adult society demands that each of its members shall possess. In the other case it is viewed from the standpoint of the process by which the young, immature, impulsive child comes into possession of the knowledge and experience essential to membership in society. In the former the child learns mainly from books, in the latter from books plus experience. Thus the teacher's interpretation of the curriculum, whether it be conscious and studied or merely inherited as a tradition, becomes her working philosophy in school.

3. Socializing and motivating the curriculum

Meaning of socialized subject-matter. To apply this second interpretation to the curriculum is to socialize and to motivate the work of the school. A subject is socialized

when the knowledge it contains bears intimately upon the child's contacts with the physical and social world about him, and when it can be promptly converted into active experience with one or another aspect of that world. It is motivated when it is selected and organized with respect to the child's real interests and his immediate contacts with life about him.

How to socialize the curriculum. How to make such a curriculum, or how to reshape a traditional curriculum to these ends, is the vital point at which this whole question becomes a practical issue with the teacher and principal. In order to accomplish either of these things the teacher must keep in mind not the textbook alone, but also the points at which the materials within the text connect up with the outside world and with the natural spontaneous activities of children. The child is continually dealing with quantitative aspects of his environment, social, physical, and economic, and his arithmetic lessons should not be left to find their own connection with this experience.

This does not mean that the course in arithmetic will discard the necessary memory work involved in mastering the number combinations, but it does mean that the course will involve the kind of experience with numbers that will help the child to a new way of looking at the world about him, and to facility in some very essential social processes. The child may learn all the tables of measure there are in his text, and work the problems, but until he has fairly converted these standards or units of measure into a language they are not socialized, but are held in his memory as so much verbiage or so many bare symbols and rules.

Examples in socialization of studies. On the way to school the child sees a snake, a squirrel, and a busy ant hill, and the flowers he brings were found at a certain place on

the roadside. Here he has an abundance of material for a splendid oral or written language lesson. But when he goes to write he cannot say how long the snake was, how far from the little bridge he found it, how far he watched it run before it entered a hole; he cannot tell how high up the squirrel was in the tree, the dimensions of the ant hill, or how many minutes it took to gather the flowers, though these would all be vital points in the story — and all because the inches, feet, yards, seconds, and minutes of the arithmetic had not been made to do their proper work outside of class. Again, he learns the number of cents, nickels, dimes, and quarters in a dollar, but is much embarrassed when he attempts to make change at a counter.

To socialize and motivate arithmetic the teacher must force numbers into action in connection with all kinds of experiences, not only for the sake of extending the child's knowledge of number, but also for the sake of facilitating expression, for the sake of the new mode of appreciation one gains from concrete experience, and for the sake of more accurate thinking where number is involved.

The teacher's responsibility. A printed course of study or a text can scarcely be large enough to give specific directions for so many details, nor can the maker of texts and courses know in advance the thousand particular opportunities the teacher is going to have with a given group of children in a given community for socializing and motivating the work in arithmetic. This is very largely the teacher's problem. She must discover the opportunity and the material to work with. If necessary, she should note down from day to day typical situations in which children find a real use for quantitative expression. This practice will not only accumulate the richest kind of supplementary material for arithmetic, but will train the teacher in a type of observation that is highly important in all her teaching.

What is true of arithmetic is equally true of other subjects. Most homes contain newspapers, magazines, and books, and the opportunity for developing interest in reading is almost unlimited if the teacher is on the alert. How much more the lessons in civics would mean if the thousands of county court-houses, city halls, state capitals, police, street, and fire departments were converted into laboratories for our schools! These are but a few illustrations of what it means to socialize and motivate the course of study, but these are enough to suggest reasons for putting the newer studies into the curriculum, and to convince the teacher that even after these studies are included, success still depends very largely upon the materials she brings in to supplement the text and connect the subject in a vital way with life outside the school.

How to gather these materials. This socialization of the child's work is too important a matter to be left to a casual or haphazard handling. It may involve more by far than the above illustrations imply if we carry the principle into the organization and conduct of the school as well as into the selection of the subject-matter of the courses offered. Elsewhere (Chapters V, VI, VIII, IX, and XII) we have developed the implications of this principle in the matters of organization, discipline, and the general social atmosphere of the school. Here we are especially concerned with the problem of selecting and arranging subject-matter.

We have previously described (Chapter X) a plan for making a study of one's pupils; here we require the information suggested by that study and other information in addition. Let us consider a special type of survey for this purpose — a survey that will acquaint the teacher with the following facts about the child and the community. Let us assume that the teacher will gather these facts by first-hand contacts with the children and their homes.

1. Child's name — age — grade — mental age — I Q — health index — progress.
2. Character of the home and family life: Size of house — distance from school — size of family — occupation of father — nationality of father and mother — reading matter in home — musical instruments — connections the family has with social, professional, or commercial clubs and fraternities — equipment the child has for play at home and with near-by children — work done by child at home — source and amount of spending money child has and the uses he makes of it — what he reads at home — what he likes best to read — what he means to be when he is a man.[1]
3. The child's interests and abilities: What he likes best to play — what games he is most proficient in — what studies he likes best — what studies he is most proficient in — what games and studies he likes least and is least proficient in — his strong and weak points as a leader and a follower — his weak points in: manners, morals, language, dress, cleanliness, knowledges, skills, physique.

This is only suggestive of the types of knowledge which a teacher needs in order to know how to socialize and motivate the work of a given child. It may seem an endless task to make such a survey of thirty or forty pupils. The answer to such objection is that this is the only way to substitute fact for guessing and false assumptions in this matter.

4. Types of subject-matter

Form and content studies. In the past the studies of the curriculum have been divided into two groups, called respectively form and content studies. Form studies include reading, writing, spelling, arithmetic, and grammar; while geography, history, literature, civics, and physiology are commonly classed as content subjects. In the form studies the emphasis is placed upon the mastery of formal rules and

[1] Williams, J. Harold. *Scale for Grading Neighborhood Conditions.* Research Bulletin no. 5, Whittier State School, Whittier, California.

symbols. The form of the letter or word in spelling, reading, and writing, the formula or rule or law in mathematics and grammar, have to be learned. In the content subjects there is little time spent on the mastery of symbols and rules as such. The idea is rather to get at the facts for which the combined symbols stand.

Form and content inseparable. Such a division of subject-matter may be of use in helping the teacher to think more clearly about the specific teaching problems with which she is working at a given time, but there is a genuine danger in thus separating two things so organically united as are form and content in the course of study, or in a given subject. We only have to try to imagine what value one would have without the other in order to feel the force of their intimate relationship. Historically, bare symbols arose only as they were needed to convey ideas to others, and language came before grammatical rules, yet science and mathematics have reached their high stages of development only because symbols, rules, and principles have made it possible to think clearly in the midst of vast quantities of facts. Thus, while experience (content) precedes the use of symbols and the formulation of rules (form), yet each is essential to the other, and they should not constitute a dualism in curriculum making.

When teaching writing, grammar, spelling, and arithmetic the teacher should keep this relationship firmly in mind as a further reason that her subject-matter should be thoroughly socialized and motivated. This will not do away with the necessity for drill in writing, spelling, or arithmetic, but it will lay emphasis upon the idea of unity in the curriculum as a whole. Then spelling lessons will be frequently drawn from the composition work and from other studies. Language lessons will find their content in nature study, history, civics, games, and plays; the reading

lesson may frequently be drawn from the history, the daily paper, or the composition lesson; and the number lessons will go into action in manual training, domestic science, and composition.

Poor teaching results from too great separation of the two. The abuses that come from an undue separation of form and content need only to be suggested. It is often assumed that reading, for instance, is entirely a form subject. This explains why the selection of subject-matter for beginners is often made on the basis of length of words, rather than on the basis of the meaning the words may convey to the child. It explains, too, why some "systems" of teaching reading are wholly phonetic and mechanical, and why, until recent years, even pupils in the advanced grades studied one single reading text filled with scraps of moral philosophy, the virtue of the book depending upon the difficulty of its words and sentences and upon the formal moral teaching it contained. Similarly, the spellers were full of rules about the final *e* of primitive words, etc., followed by a list of words illustrating the rule and by other lists illustrating the numerous exceptions. We are gradually learning that such a separation of form and content in spelling does not produce good spellers.[1]

In the older arithmetic textbooks every new subject, from notation to cube root, was preceded by a rule covering the examples to be worked. This rule was committed to memory. That was one task. Then it was applied in a list of problems. That was a second task, only a little less meaningless than the first one. But the trouble had only begun, for since the rule and the problem were entirely unrelated to the child's actual experience, he must find some kind of artificial method of remembering them. Here is where the

[1] See Cook and O'Shea, *The Child and His Spelling*, chap. II, for the results of an investigation of this subject.

old-time schoolmaster flourished his ferrule and insisted upon his doctrine of repetition, repetition, repetition.

Double character of all studies. The attempt to treat these subjects as though they had no content is only slightly more ridiculous than to assume that history, nature study, geography, manual training, and music have no form. We cannot discard names and dates in history, nor places in geography, nor can we study nature without some system of classification for the objects we deal with. The classifications of trees, birds, plants, and land forms are based upon fundamental principles which have to be mastered as we proceed with the study.

The danger is that we shall try to master the system of classification apart from the things it classifies, or else go to the other extreme of ignoring dates, names, and principles, to the end that the child gets the merest smattering of unrelated facts. There is a great deal of the formal in arithmetic, and a great deal of content in geography, but arithmetic is not without content and geography is not without form. And while the teacher should see her problem clearly as dealing specifically with the one or the other at a given moment, she must always keep that broader perspective which sees each as a single aspect of the larger whole in which both appear in proper relationship.

5. The tendency in curriculum-making

Changing conceptions of education. The curriculum of to-day is much richer in content material and far less formal than was the curriculum of even a decade ago. The idea that because a subject is useful it is therefore not educative has about disappeared, with the result that the modern curriculum provides for a rich and varied experience in almost every conceivable line. Through dramatization, plays, games, and calisthenics, and through practical work in per-

sonal hygiene, the child's physical development is being provided for; through civics, the study of public sanitation, and history, as well as through play and coöperative work in field and laboratory, the moral and social side is being cared for; through music, drawing, painting, and handwork, æsthetic training is provided; while through cooking, sewing, manual training, designing, agriculture, and gardening the child receives a useful introduction to home making and to numerous basic occupations and economic and social processes.

The subject-matter of the older studies is being sifted more and more to meet these broader aims of the school, so that one may say that the curriculum of to-morrow promises to be very true to real life. Training for the eyes, the ears, the hands, the reason, the imagination, as well as for the memory, and this as much from real experience as from the printed page, characterize the new curriculum.

Current view of curriculum revision. In the development and reorganization of curricula the older idea of leaving the task to subject-matter experts is largely past. To-day we begin very differently. We start with a general philosophy of education, which is much as we have set it down in Part I of this book. Education is to help the child find his place in a democratic society of children and adults. From here we do not go to our classified knowledges direct, assuming, for instance, that all arithmetic is the same, or that all language study is the same for all children and in all communities. Rather we recognize now that the child's world is full of number or quantitative situations which he faces every day and will face all his life. These number situations are important. They are arithmetic, to be sure, but they are chosen not because they fit perfectly into the *science of arithmetic*, but rather because they fit perfectly into the *actual experience of living*.

Organization of studies. This brings up the important question of what are to be our studies. Shall we discard the idea of arithmetic as a science, or as a tool subject, in favor of arithmetic as it is incident to life situations, and so exchange the present type of arithmetic course and text for a collection of independent activities in which there are number situations to be met? If so, then we will do this on the theory that what we learn when we are engaged in a real activity will be more worth while and more easily learned than what we learn as subjects are now organized.

Some insist that all our present subjects could be discarded entirely, and that we could start each child to work, alone or in a group, on subjects or activities that are drawn from life as the child now sees and will see it, and that in the course of his years in school he will have met and solved so many of these life problems that he will have gained a knowledge of the sciences and arts as we now think of them.

New experiments. We have schools in which many experiments of this character are at present under way.[1] The old sharp lines that separate history from geography, arithmetic from construction work, and reading from language work are being questioned, and in places they are breaking down. We hear more and more discussion of "general mathematics," "the social studies," "health and physical training," and "English," each of which represents a group of studies. We hear much, too, of "activities" and "projects," and much condemnation of the old passive sort of learning. More and more the child is given responsibility, not merely for remembering something read, but for doing something that will involve reading, figuring, expression,

[1] See *Twenty-Sixth Yearbook of the National Society for the Study of Education* for discussion of many of these schools. See also the literature on the project method.

observation (in the field, perhaps), investigation, construction, and independent effort. Similarly, extra-curricular activities and the organization of the school are being studied for the contribution they may make to the social, moral, and executive training of the child.

Between the studies as now organized and "activities" as here suggested there is a wide gap, and one not easily bridged by the curriculum maker. There is no doubt that in theory these experiments are in the right direction; the real test, however, is the outcome of the change. We have now no adequate measure of this outcome. We have much general observation and opinion, but little scientific proof of superior worth. This does not argue against such experimenting, but it reminds us that we are dealing not only with a fundamental change in theory but also with an equally fundamental change in subject-matter and in class management. Only those who comprehend the meaning of these changes should try to effect them in a large way.

The grading of subjects. Where shall each study begin and where end in the curriculum? There is no satisfactory answer to this question unless we refer to a program of a given type, and even then there will be wide difference of opinion. In this, as in many other curriculum problems, our answer would need to apply to the individual child, and even then we could not decide the matter in purely objective terms. We might omit geography as a formal subject until grade six, but teach much of it in our reading, language, and history courses in earlier grades.

In this matter there is wide variety in practice. By an extensive examination of the courses of study in the counties and cities of California [1] it has been shown that there is practically no common agreement, and this applies not

[1] Bagley, William C., and Kyte, George C. *The California Curriculum Study*, University of California Printing Office, Berkeley, California.

only to the grade placement of the various subjects, but even more to the arrangement of topics within the courses. This is probably what a study of the courses in any State would show.

The purpose here is not to offer a recommendation on this point, but only to suggest that the problem is one of major importance in curriculum organization and administration. The possibilities of a combination of subjects, or of correlation between subjects, is a part of the problem.[1]

The teacher and curriculum revision. Naturally the individual teacher will have only limited contact with the larger movement of curriculum revision that may be going on in her city or county. The nature of this contact, though, is our concern in this book.

We may set it down as axiomatic that a teacher cannot teach well that which she does not fully comprehend and that in which she does not have a definite interest. This means that the teacher must know and be interested in the curriculum which she teaches. This can be the case only if she has a hand in its making. These propositions are fully accepted by progressive school systems, and are dictating the method by which curriculum revisions are being effected.[2] The work is done by large committees and subcommittees, headed by supervision and curriculum experts. The teacher will be a member of some group, and have a chance to study and be in touch with every step of the work. For this responsibility the teacher must be equipped by interest and training, or expect to stand aside and let others do an important part of her work for her.

[1] See Chapter XII, on "The Daily Program."

[2] Most progressive cities are bringing their teachers into intimate and responsible contact with the work of curriculum revision. Denver, Detroit, Berkeley, Oakland, and Los Angeles are cities that have recently attracted attention by the systematic way in which they have provided for teacher participation in curriculum construction.

To participate in this work the teacher will succeed best who:

1. Masters the general theory upon which the modern curriculum is based.
2. Familiarizes herself with the ideas and methods of research in this field.
3. Is willing to experiment with new ideas, and with new materials and methods.
4. Studies her pupils and community for curriculum ideas and materials (see sec. 3 above).
5. Is willing to give time and thought to the problem.
6. Is willing to coöperate and to learn from others.

The problem as a whole. Making and revising curricula involve four major problems, as follows:

1. What is our general theory as to what constitutes value in subject-matter?
2. How should subject-matter be selected and organized in order to meet the requirements of this theory?
3. Similarly, how should the curriculum be administered?
4. How may we test the worth of the curriculum materials as taught?

In a sense these four problems represent the order of procedure in curriculum construction. The first of them we have at least tentatively solved, thanks largely to Professor John Dewey. The second we are now working on. In theory we have, to a considerable extent, broken with the old organization of materials and with the old materials themselves. The terms "project," "socialized subject-matter," "motivated materials," "job analysis," "experimental schools," "laboratory schools," "creative education," "activities," and "outcomes" suggest how we have gone to life, social and physical, for subject-matter, and how we are shifting to the child and society and away from "studies," "learning," and subject-matter itself as our

point of departure for the selection and organization of curriculum materials.

The third question we are also attacking. The idea of mass instruction is being studied, and where it violates the teaching principles that grow out of the facts about individual differences, is being discarded. Experiments, such as are under way at Chicago, Missouri, and Columbia Universities; and the Dalton Plan, the Winnetka Plan, the Fairhope, the Waldon, and the Francis Parker Schools, are a few of the outstanding experiments with new types of curriculum administration.

The fourth problem is one we need to study most earnestly. The teacher should not bring new materials into her subjects without examining them carefully to see what contribution is to be, and, once new matter is introduced, serious effort should be made to find out what value it has.

The teacher must realize that while she will not be called upon to direct the thought of the country on this subject, she will be able to contribute to the movement only if she sees the great scope of the problem and finds a point in her own work at which she may take hold of it in a practical way. A study of the field through the accompanying bibliography will not be too much to expect of a modern teacher. This chapter is only a sketch, and at most it is but a brief introduction to the field with which the teacher must become familiar.

6. Chapter summary

The purpose of this chapter has been to explain the real function and character of subject-matter and of the curriculum. Such an understanding is necessary if instruction is to be managed to a proper end.

Two opposing viewpoints — one inherited from the past, the other a recent development of scientific study — have been struggling for control in our schools. The one looks upon the course of

study as an end, while the other regards it as only a means. One emphasizes the formal, the other the functional aspect of the knowledge and skills to be imparted. The one insists upon learning rules and principles as such, the other upon learning these in their real applications. These points of view are irreconcilable, and in the light of modern thought the former must yield its place to the latter.

This means that the curriculum will come to be defined in terms of social and psychological need as opposed to tradition, or the logic of subjects, and that it will be organized in terms of psychological and pedagogical principles rather than in terms of the bare logic of subject-matter itself. It means that the teacher will draw upon the social and physical life about her for materials to enrich her studies; that she will not interpret form as having no connection with content; and that the curriculum will be constantly remade in terms of changing social needs.

This makes the curriculum a changing body of material, its changes corresponding to changes in our civilization. Keeping pace with these changes requires continuous study of the subject-matter of all our courses. In this study the teacher has important responsibility and opportunity. She only is in touch with the reactions of children to new materials and methods, and this knowledge is essential in curriculum revision. Also, since the teacher is to be the interpreter of the curriculum she must make the subject-matter her very own. This she can do only by participating in its alterations. To do so she must be a student of educational theory, of the technique of research, of children, of curricula; and she must be a critical experimenter.

QUESTIONS FOR DISCUSSION

1. Re-read Chapter I, and then try to answer the following questions:
   - *a.* Mention ways in which your own elementary school curriculum supplemented your experience outside of school.
   - *b.* Were activities — plays, games, folk dancing, dramatization, music, and handwork — such as sewing, gardening, and drawing — stressed more or less than study from the printed page?
   - *c.* Did your curriculum give you any information about, or any experience in: — how to meet people in a business way, in a social way; how to offer your services to a stranger in need of help; public or civic duties in matters of sanitation, public office, community library, park, playground, celebrations, the care of

public property; propriety in dress, and propriety in conduct on the street and in public places; the value of money, public enterprise, paying taxes, etc.? If so, in connection with what studies?

d. Classify the studies you took under the school aims discussed in chapter one. What studies can properly be placed under more than one of these aims?

2. What is meant by a static curriculum? In what sense is change essential to the curriculum?
3. Mention some changes that have taken place in the American elementary school curriculum which reveal fundamental social change in American life.
4. What of the newer studies would a strictly informational type of curriculum ignore? What is the objection to such a curriculum? Are the different studies in such a curriculum likely to be carefully correlated?
5. What is meant by socializing and motivating the curriculum? What is the teacher's reponsibility in the matter?
6. What is meant by form and content subjects? Distinguish form from content in reading, arithmetic, civics, geography.
7. What advantage is there for the teacher in such a division of subject-matter? What are the dangers in such a separation?
8. Explain how the course in geography might be taught largely as a formal subject. Distinguish form and content in music, drawing, and domestic science.
9. Through what studies would you expect a child to obtain training in observation, memory, imagination, reasoning, the senses of touch, hearing, and sight?
10. How would you aim to supplement the ordinary curriculum to obtain the ends suggested in question 9?
11. In what way would you expect the course in history to supplement the course in geography?

PROBLEMS FOR STUDY

1. Select a group of arithmetics published before 1800, another group published about 1860 to 1880, and a group recently published. Examine the prefaces and introductions and compare them as to the general theory of education and of curriculum materials they contain.
2. Compare also as to the character of the materials presented. To what extent do they seem to reflect the interests and activities of children? To what extent do they introduce the child to typical activities (social and economic) of adult society?
3. Make a survey of a community for the purpose of providing socializing materials for the social studies, such as:

a. Materials from home life

b. Materials from occupations
c. Materials from political life
d. Materials on manner and dress
e. Materials of a historical nature

Show how each group of materials (facts and activities) may be worked into a typical sixth-grade course of study.

4. Prepare an up-to-date description of one of the experimental schools referred to in this chapter.
   a. Explain (drawing from proper sources) the principles upon which this school is organized.
   b. Describe its course of study, and characterize the course in the light of the discussion in this chapter.
   c. Compare or contrast the child's work in the school, using a typical day's work in contrast with a similar day's work in an old type of school.
5. Work out a plan whereby a county superintendent of schools might undertake a program of curriculum revision.

REFERENCES FOR ADDITIONAL READING

Bobbitt, Franklin. *How to Make a Curriculum.* Houghton Mifflin Co., Boston, 1924.

Bobbitt, Franklin. *The Curriculum.* Houghton Mifflin Co., Boston, 1918.

Bobbitt, Franklin. "The New Technique of Curriculum-Making," in *Elementary School Journal*, vol. 25. (Sept., 1924.)

Bode, Boyd H. "Why Educational Objectives?" in *Journal of Educational Research*, vol. 10. (Oct., 1924.)

Bode, Boyd H. "Determining Principles of Curriculum Making"; in *Educational Administration and Supervision*, vol. XII, p. 217. (April, 1926.)

Bonser, F. G. *The Elementary-School Curriculum.* The Macmillan Company, 1920.

Bonser, F. G. "The Reorganization of the Curriculum of the Elementary Schools"; in *Addresses and Proceedings of the National Education Association*, vol. 62. (1924.)

Brim, Orville G. "The Curriculum Problem in Rural Elementary Schools"; in *Elementary School Journal*, vol. 23. (April, 1923.)

Burke, Agnes (and six others). *A Conduct Curriculum for the Kindergarten and First Grade.* Chas. Scribner's Sons, New York, 1923.

Buswell, G. T., and Judd, C. H. *Summary of Educational Investigations Relating to Arithmetic.* University of Chicago, Supplementary Educational Monographs, no. 27, 1925.

Charters, W. W. *Curriculum Construction.* The Macmillan Company, 1923.

Charters, W. W. "Activity Analysis and Curriculum-Construction"; in *Journal of Educational Research*, vol. 5. (May, 1922.)

Charters, W. W. "Functional Analysis as the Basis for Curriculum-Construction"; in *Journal of Educational Research*, vol. 10. (Oct., 1924.)

Collins, Ellsworth. *An Experiment with a Project Curriculum.* The Macmillan Company, New York, 1923.

Department of Superintendence. *Second Yearbook, The Elementary-School Curriculum.* Department of Superintendence, National Education Association, Washington, D.C., 1924.

Department of Superintendence. *Third Yearbook, Research in Constructing the Elementary Curriculum.* Department of Superintendence, National Education Association, 1925.

Department of Superintendence. *Fourth Yearbook, The Nation at Work on the Public School Curriculum.* Department of Superintendence, National Education Association, Washington, D.C., 1926.

Dewey, John. *The Child and the Curriculum.* University of Chicago Press, 1902.

Dewey, John. *The School and Society.* University of Chicago Press, 1900, 1915.

Dewey, John, and Evelyn. *Schools of Tomorrow.* E. P. Dutton, New York, 1915.

Flanders, Jesse Knowlton. *Legislative Control of the Elementary Curriculum.* Teachers College Contributions, no. 195. New York, 1925.

Glass, J. M. *Curriculum Practices in the Junior High School and Grades 5 and 6.* Supplementary Educational Monographs, no. 25, University of Chicago Press, 1924.

Gray, W. S. *Summary of Investigations Relating to Reading.* University of Chicago, Supplementary Educational Monographs, no. 28, 1925.

Gray, W. S. "Summary of Investigations Relating to Reading (July 1, 1924 to June 30, 1925)"; in *Elementary School Journal*, vol. 26. (Feb., March, April, and May, 1926.)

Horn, Ernest. "The Curriculum Problem Attacked Scientifically"; in *Addresses and Proceedings of the National Education Association*, vol. 63. 1925.

Judd, C. H. "How Modern Business may Aid in Reconstructing the Curriculum"; in *School and Society*, vol. 17, pp. 281–87. Also in *Addresses and Proceedings of the National Education Association*, vol. 61. 1923.

Kilpatrick, W. H. "How shall we Select the Subject-Matter of the Elementary Curriculum?"; in *Journal of Educational Method*, vol. 4. (Sept., 1924.) Also in *Addresses and Proceedings of the National Education Association*, vol. 62, 1924.

Kilpatrick, W. H. "Subject-Matter and the Educative Process"; in

Journal of Educational Method, vol. 2. (Nov., 1922, and Feb., and May, 1923.)

Lincoln School of Teachers College, *Publications*.

McMurry, C. A. *How to Organize the Curriculum*. The Macmillan Company, 1923.

Meriam, J. L. *Child Life and the Curriculum*. World Book Co., Yonkers, New York, 1920.

National Education Association. *Research Bulletin*, vol. I, no. 5; *Facts on the Public School Curriculum*. National Education Association, Washington, D.C., Nov., 1923.

National Education Association. *Research Bulletin*, vol. III, nos. 4 and 5; *Keeping Pace with the Advancing Curriculum*. National Education Association, Washington, D.C., Sept., and Nov., 1925.

National Society for the Study of Education. *Fourteenth Yearbook*, part I; *Minimum Essentials in Elementary-School Subjects*, 1915. See also *Sixteenth Yearbook*, part I; *Seventeenth Yearbook*, part I; *Nineteenth Yearbook*, part I; and *Twentieth Yearbook*, part I. The *yearbooks* for 1923 to 1927 inclusive contain discussions and results of research and experiments that are of first importance. They also contain extensive bibliographies.

Parkhurst, Helen. *Education on the Dalton Plan*. E. P. Dutton, New York, 1922.

Rugg, Harold. "A Preface to the Reconstruction of the American School Curriculum"; in *Teachers College Record*, vol. 27. (March, 1926.)

Rugg, Harold. "What shall Constitute the Procedure of National Committees?" in *Journal of Educational Psychology*, vol. 15. (Jan., 1924.)

Snedden, David. "Planning Curriculum Research"; in *School and Society*, vol. 22. (Aug. 29, Sept. 5, and Sept. 12, 1925.)

CHAPTER XII

THE DAILY PROGRAM

Outline of Chapter

1. Organizing the day's work: The problem stated — Principles and problems in program-making — The time available — Number of recitation and study periods — Number of courses offered — The possibility of alternating courses — Other types of combinations — Divisions of daily program.
2. The problem of time allotment: Difficulties in determining time allotment — How we have decided time allotment in the past — Time allotment in representative rural and city systems — What these figures suggest.
3. Preparing the program: Purposes to be served — The order of study — The problems of interest and fatigue — Rules governing work and rest.
4. Typical programs: A proper program — A three-class program — Program for a Rural School.
5. How to use the program.
6. Summary — Questions — Problems — References.

1. Organizing the day's work

The problem stated. The organization of the movements of children and of the handling of materials is much simpler than is the organization of the day's work. Once the children are graded and classified, and the course of study outlined, we have then to decide that perplexing question of the relative value of studies, and to determine the order in which they shall be dealt with in the study and recitation periods of the day. Nor is it merely an academic question as to which is the more important, geography or spelling, but just how important each is as measured by the amount of time it is to consume.

How to program the day's work, or the week's work, is a question that must be answered very differently in different schools. First of all, schools differ as to the extent and character of their curricula. Some have many while others have few or none of the more recent studies and activities. Some combine civics with history, language with grammar, literature with reading, and geography with science and nature

study, while others treat all these subjects separately. Again, some schools stress pupil activities, and work out their courses in the form of projects. This tendency in the early grades is becoming more and more marked. With this method of work, subjects are thrown together and the subject is made subordinate to the activity. The result is that the time schedule of the older type of organization is being replaced by a far less formal scheme of time allotment.

Again, in the upper grades there is an increasing tendency to reorganize under the junior-high-school plan. This greatly alters the programs of grades seven and eight by introducing a richer program of studies, by departmentalizing the instruction, and by laying greater stress upon laboratory, field work, executive training, and pupil independence.

Thus, the time schedule suited to the older type of eight-grade organization, with its typical academic program, would be ill-suited to the school that emphasizes activities or project procedure as opposed to book study; or to the school that includes laboratory, shop, studio, stage, gymnasium, and conservatory; or to the school that has departmentalized its instruction; or to the platoon type of school; or to the school that by any method whatever tries to adjust instruction to the proper needs of the pupils as individuals.

Principles and problems in program-making. When we deal with the problem of time allotment, therefore, we must keep in mind that we are dealing with a complicated subject, and that no single prescription can be written that will not require careful interpretation for any one of the wide variety of purposes, sets of materials, and organizations here suggested.

There are certain facts and principles, however, that will assist in the development of a program, and that have wide

enough application to warrant our suggesting them as points of departure for the teacher or principal or supervisor who faces the task of working out a time-schedule. These may be stated as follows:

1. In any course, or in any classroom, there is a given amount of subject-matter to be learned or there are a given number of activities to be carried out, during the year. By dividing the amount to be covered by the number of months, weeks, or days we may obtain a fair index of the rate at which the work must be done. Either the amount to be done dictates the time required, or the time required dictates the amount that can be done.
2. The number of recitations to be conducted, or study periods to be supervised, or activities to be directed, in the day (or week) affords a basis for determining the average time available for each. (Whether or not a study or activity shall be pursued each day, or given relatively more time on fewer days of the week, is a problem upon which experiment is needed. A little writing, or drawing, or singing, or dancing each day is undoubtedly better than a much larger amount once a month. The same would be true of work on arithmetic or history or reading. Just how best to distribute the time for each type of work is an important though only partially settled question.) [1]
3. There is the relative value of each recitation or study, to be decided upon as a basis for determining which studies shall have more and which less than the average time allotment.
4. There is the order in which each lesson shall be studied and recited, to be determined in part by the relative difficulty of the studies, as shown by the tendency of each to weary the child, in part by plans of building and school organization.
5. There is the general problem of the distribution of the child's energy throughout the day.
6. Then there is the division of the day into work and recreation periods, to be determined by the influence of recreation upon keeping the child's energy at a high state of efficiency.

[1] See: Thompson, Mary E. *Psychology and Pedagogy of Writing*, p. 102; Freeman, Frank N. *The Teaching of Handwriting*, p. 73; Thorndike, Edward L. *The Psychology of Arithmetic*, chap. VIII; Starch, Daniel. *Educational Psychology*, chap. XI.

The time available. The teacher will usually have from twenty-eight to forty weeks of time in which to complete the work outlined for the year, and each school day is in most places five hours in length, beginning at 9 A.M. and closing at 3 P.M. A six-hour school day, from 9 A.M. to 4 P.M., also is frequently found, especially in rural schools. The tendency in this country seems to be to lengthen the school year, but to shorten the day, the latter particularly for the earlier grades. However, with the increasing emphasis upon supervised play, and upon field and laboratory and stage work, it is quite likely that the school day will tend to grow longer rather than shorter in the future.[1] The day is ordinarily divided into four work periods of approximately equal length, the forenoon and the afternoon each being broken by a fifteen-minute rest period, and with an hour to an hour and fifteen minutes' rest at noon. There are numerous variations from this to meet the needs of special cases, such as increasing the number of recreation periods for the younger and for physically defective children and of doing away with the recess periods for the upper grades.

Deducting at least an hour and a half for rest we have left in a six-hour day two periods of ninety minutes each, and two periods of seventy-five minutes each in which to plan for the necessary number of daily recitations. The time is very close at hand when we shall cease to speak of these rest periods as if they contained nothing. These periods are coming to be more and more intelligently used in our best managed schools, to the end that all children engage in some kind of free play that not only rests and refreshes them physically and mentally, but gives them important social and executive training as well.

[1] The platoon plan of organization, and other plans for diversified programs of instruction involving activities, should make a longer day possible.

Number of recitation and study periods. The number of recitations the teacher will have during the day will depend, first of all, upon the number of grades in her room. The larger city or consolidated rural school will have but one grade in a room, while the one-room school will probably have eight. The time schedule for a room containing but one grade, divided into two sections a half year apart in their studies, is not difficult to arrange, but with eight grades present the problem is extremely complex. In the one case the teacher will have plenty of time to hear the necessary recitations, and to supervise much of the study, while in the other she will be busy practically the entire time with recitations alone. The writer has before him two daily programs now in use, one by a teacher of a single sixth grade, the other by a teacher of all eight grades. The one conducts nine, the other thirty-six recitations each day. It is obvious that these two teachers cannot give equal care and attention to the supervision of study. One of these teachers has an average of more than thirty-six and the other less than ten minutes for each recitation.

Another point needs to be kept in mind. For good reasons a teacher may have more class groups than grade groups in her room. In reading, for example, because of the wide variation in the abilities of pupils it is often wise to have the grade broken up into three groups for purposes of recitation. This gives greater homogeneity in the group, and helps to individualize the instruction as well. This may apply to any subject, and the principle should be applied as far as time and number of grade groups permit.

Number of courses offered. The number of recitations will depend upon the number of separate courses offered. English may be one or many separate courses. Reading, phonics, language, spelling, grammar, literature, dramatics,

and writing may be treated as one subject, or as eight. Similarly, science may include geography, nature study, and gardening. The program must vary, therefore, in accordance with the curriculum organization.

It should be kept in mind that the schools have been increasing the numbers of courses at a rapid rate, and that we have rarely dropped a subject once it has been developed into a separate course.[1] There must be some end to our specialization. What is needed now is not more special divisions but a reorganization of subject-matter. For young children especially there is some advantage in keeping their work unified. Phonics as a separate subject, distinct from reading and spelling and language, represents an adult specialization that is practically meaningless in the logic of childhood.

The advantage of organizing primary work into activities rather than subjects is in having facts and activities presented in unity. Each fact, principle, or skill acquired is part of a general undertaking, and much if not most of its educational value is thus determined. One of the present major problems in education is to work out the proper logic of our subject-matter.

Our interest here is not to develop this point, but to note its importance and its bearing on program-making. Every teacher will do well to examine her courses of study carefully, and to consider what of the subject-matter of each course can be combined with the subject-matter of some other course. If spelling can be taught as well incidentally

[1] Adding a new course means that textbooks will be made, courses printed, and daily schedules formed to give it place. Once thus entrenched in the school structure, and backed by economic considerations, it is not easy to get rid of it. Dr. Jesse K. Flanders has pointed out, in his *Legislative Control of the Elementary Curriculum*, that during the period from 1903 to 1923 the number of curriculum prescriptions increased by sixty-five per cent.

with other courses, then we should not give it a special place and time on the daily schedule.

For an eight-grade, one-teacher school, every possible combination should be made, to the end that separate courses may be reduced to the lowest number consistent with good work. It does not seem wise to offer a definite prescription for doing this. Schools differ greatly in the number of pupils per grade, in what pupils have had in past years, in the experience and skill of the teacher, in the supervisory assistance available, in teaching materials and equipment, in the abilities of pupils, and in the educational needs of the community. In some schools certain of the work can be organized about projects, while in other schools this would not be practicable.

The possibility of alternating courses. Another factor may enter to alter the number of separate class periods. We have assumed (without sufficient justification) that there is a definite unalterable sequence to be observed in many of our school courses. That is, the subject-matter of grade VI in each subject must not be taught until the child has mastered the subject-matter of grade V. The more we have looked into the merits of this proposition the more we see that it is unsound. In many of our subjects the child could begin at the back of his book and work toward the front of it almost equally well, should we choose to present the chapters or sections in that order. This shocks us only because we have but recently begun to realize that our old sequence idea was largely without foundation.

Because of this fact we have found it possible to alternate the work of two grades and so to reduce the number of separate classes. For example, we can have the fifth and sixth or the seventh and eighth grades work together in such a subject as geography or history, or some parts of English, or civics, or hygiene, and to some extent in other subjects.

If grades seven and eight work over the subject-matter of grade-VII history in 1928, then they may cover the grade-VIII history in 1929. This gives the teacher one in place of two history recitations to handle. By such alternations the 35 or 40 recitations of the rural school may be greatly reduced, with no loss to the children and with but little increase in the difficulties of teaching. In reality this is merely applying the principle suggested above, that our class or recitation groups do not need to correspond perfectly with our grade groups.[1]

Other types of combinations. Other combinations can be worked out without involving the principle of alternation. This applies not only to the programming of recitations, but to study periods as well. In arithmetic grade V may be at the board while grade IV is receiving explanations or assignments. In writing and drawing and hand work, the recitation period need pay little attention to grade groups, since the work is essentially with individual pupils. Two grades may work together in reading, the one doing oral while the other is doing silent reading.

Just what combinations of this sort can be effected is not entirely dependent upon the nature of the subject-matter, but, as already suggested, upon the character of the classes as well. In offering a prescription to illustrate this principle we must keep in mind that the purpose is to illustrate principles, and not to provide a program that can be applied without careful study of individual classes.

Divisions of daily program. The daily program contains three main divisions: study, recitation, and recreation. If recreation consumes an hour and a half, then in the six hours from 9 A.M. to 3 P.M. there are left four and a half

[1] One has only to review the results of the extensive test programs to be convinced that grade groups do not mean ability groups. This is about as true in one subject as in another.

hours for study and recitation. The question of how to divide the time between these two activities will depend partly upon the practical difficulties to be overcome in working out the program, but as far as possible it should depend upon the nature of the work to be done, and the need for supervision of the study.

Aside from the help given in a careful assignment of the lesson the child will need very little supervision over his study of spelling. The same is not true, however, of nature study, theme writing, or geography. If the teacher has any time available for the supervision of study therefore she should plan as far as possible to have it at a time when supervision is needed. This is also easy to work out in a room with but one or two classes, and next to impossible in one of many classes.

2. The problem of time allotment

Difficulties in determining time allotment. The problem of time allotment is made difficult by the fact that in organizing our courses of study we have no way of determining (without experience) just how much of a given kind of material can be mastered by a class in a given time. In reality we make up our courses with our attention fixed not on "time required," but upon "desirable things to be taught." The result is that there is often too much to be done in the time available. This is shown by the fact that we have very large numbers of retarded and very small numbers of accelerated pupils in our schools.

How to lay out the work of each course so that the sum of the courses in any grade will exactly fill the time of an average pupil is difficult. Perhaps there is no scientific way of determining just what part of the total time should be devoted to each of the studies of any grade. This is, after all, the old question of what studies are of most worth,

and we have no way of finding out exactly what any study contributes to the child or to society. It is worth more to know how to read than it is to know how to paint, yet we want artists, and we all want to be able to appreciate art; so we finally face the problem of dividing the time between reading and art work. Thus it is with all the studies, and also with the many topics within any given study.

How we have decided time allotment in the past. In the past we have judged roughly, and we shall continue to judge roughly what per cent of the school time ought to be devoted to each of the studies. As time goes on, however, and as we refine our subject-matter by excluding more and more of the materials that *seem to us* to be of little value, and bring into the courses more and more materials that have a *definable* value, we shall be able to put a sharper test on the worth of our studies and so have a better *judgment* of the proper apportionment of time. By study and experiment, too, we shall learn better methods of instruction and thus obtain more accurate knowledge of how long it takes to cover a given body of material.

Time allotment in representative rural and city systems. Some studies will properly require more time both for study and for recitation than others, first, because some are more important than others, and second, because some are broader and more difficult to master than others. While there is no way of saying exactly how much more time should be spent on English than on mathematics in a second-grade class, we know roughly that the English training at that age is relatively more important, and that it should have a relatively larger share of the time.

The rather serious study of time allotment as an educational problem began some thirty years ago.[1] Since then

[1] See the *Sixtieth Annual Report of the Massachusetts Board of Education*, pp. 437–80, 1895; also, Payne, Bruce R., *Public Elementary School Curriculum.*

the curriculum has been greatly changed, and it is now in process of more fundamental change than ever before. We are experimenting more and more intelligently than heretofore not only with materials, but also with method, organization, management, and all that affects the teaching situation. Ten years ago we would have done well to follow the consensus of opinion in the matter of time allotment.[1] Today such a standard is very useful as a check on practice, but before following it we have to take account of the way and extent to which we vary from the traditional forms and practice in our aims, materials, organization, and methods.

It will be of some value in this connection, however, to review present-day practice. For this purpose two sets of figures are presented. The first table shows the average time allotted to each of the subjects, by grades, in a large sample of the one-teacher schools of California; the second table shows similar data for a group of 49 cities.

What these figures suggest. These figures are offered not as recommended distributions (for those, see sample programs following), but as pictures of typical current procedures. A comparison of the two sets of figures is interesting.[2] In both the old three R's hold a strong position. This is much more true, however, of the one-teacher schools than of the city schools. In contrast we see that the one-teacher school has been more reluctant to give time to the social studies and to all the newer courses.

While these figures are averages, still one wonders at the wide differences between rural and city schools. It must be kept in mind that we do not expect all programs to be alike, yet it would be impossible to justify the differences

[1] See Holmes, Henry W. "Time Distribution in Subjects and Grades in Representative Cities"; in *Fourteenth Yearbook of the National Society for the Study of Education*, part I, 1915.

[2] Such comparison is only roughly fair because of differences in methods used in assembling the data.

Table V. Distribution of Time by Grades and by Subjects One-Teacher Schools of California[1]

Subject	Minutes per Week by Grades								
	I	II	III	IV	V	VI	VII	VIII	Totals
Language	46.8	77.5	148.0	188.0	204.2	217.2	203.8	217.6	1303.1
Reading, Literature	454.1	391.5	356.7	238.6	244.0	226.9	216.7	194.1	1322.6
Spelling	87.7	101.0	126.7	116.2	141.0	134.4	119.5	101.2	927.7
Penmanship	69.8	52.0	59.6	61.4	62.7	64.2	59.3	58.5	487.5
Arithmetic	205.7	202.5	239.6	270.2	267.0	263.6	276.2	261.5	1986.3
History	8.2	6.9	14.5	71.7	146.5	134.3	126.0	144.5	652.6
Civics				2.9	10.8	11.9	41.9	63.5	131.0
Geography	14.8	13.7	66.7	132.8	144.4	136.6	137.8	162.6	809.4
Science	17.1	18.7	18.9	22.2	22.0	22.0	24.6	25.3	170.8
Hygiene and Physiology	10.9	10.3	16.1	29.7	33.0	52.7	54.2	41.4	248.3
Recess	97.7	92.5	118.5	148.0	142.0	139.7	147.1	134.7	1020.2
Drawing	40.7	36.0	36.7	41.4	37.0	46.1	41.2	48.5	327.6
Music	48.8	54.5	39.9	49.5	43.1	51.7	54.2	48.8	390.5
Opening Exercises	15.2	10.2	15.4	16.9	10.2	19.7	8.8	20.9	117.3

[1] Data are assembled from numerous tables in *The California Curriculum Study*, by Bagley, Wm. C., and Kyte, Geo. The University of California Press, 1926.

Table VI. Distribution of Time by Grades and by Subjects in 49 City School Systems[1]

Subject	Minutes per Week by Grades								
	I	II	III	IV	V	VI	VII	VIII	Totals
Language	127	136	153	174	180	187	199	206	1362
Reading	430	413	339	250	185	165	146	140	2068
Spelling	79	87	90	89	85	82	76	73	661
Penmanship	74	77	78	80	79	77	68	62	596
Arithmetic	96	143	193	206	211	211	212	211	1483
History	54	69	65	89	101	110	152	167	807
Civics	49	55	54	51	54	55	70	81	469
Geography	45	50	76	143	159	166	152	137	928
Science	49	49	52	48	48	49	54	61	410
Hygiene	38	39	40	41	49	48	48	40	343
Physical Training	102	99	99	100	100	101	98	104	803
Supervised Play	90	83	89	70	85	85	88	79	669
Recess	123	123	123	115	111	111	110	102	918
Industrial Arts	60	60	60	67	70	81	103	109	610
Drawing	91	92	91	88	83	77	79	81	682
Music	71	74	74	77	76	80	70	76	598
Opening Exercises	60	59	59	50	54	55	55	54	446
Miscellaneous	88	74	81	80	83	84	80	75	645

[1] Figures arranged from Ayer, Fred C., *Studies in Administrative Research*, Bulletin 1, 1924. Department of Research, Seattle Public Schools. It should be stated that these figures are averages for 49 cities, but that in many instances the figure is an average of fewer than this number of cities. This applies especially to supervised play, civics, and hygiene.

between these two tables. If we examine school survey literature we will find that even within a single city there are similar evidences of chaos in this matter.[1] It is interesting to note that an earlier investigation of time allotment in the subject of arithmetic alone, covering six hundred and thirty cities, tends to show that the systems included in the above tables average high in the proportion of time devoted to arithmetic.[2]

3. Preparing the program

Purposes to be served. So far we have analyzed the problem of organizing the daily or weekly schoolroom procedure, pointed out the various factors involved, and set down certain guiding principles. In addition we have presented extensive samples of actual time-distributions as the schools of the country now operate. With these principles and figures before us we come now to the problem of drawing up a sample work program.

In drawing up such a schedule our first concern is: What purpose is to be served? This will determine the form and the character of the program. The ends to be served are obvious enough. The schedule is to guide our procedure from hour to hour through the day and the week. This applies to pupils, to teacher, and to visitors or other school officers alike. It will stand as a guide or directory, and so must be available to all.

The order of studies. After we have settled the question

[1] See: Sears, Jesse B., *The School Survey*, chap. xi; also his "Time Allotment in the Schools of Salt Lake City"; in *Educational Administration and Supervision*, March, 1916. (Contains bibliography of early studies and investigations.) See also: United States Bureau of Education, *Bulletin* no. 42, 1922, and *City School Leaflets*, no. 41, 1926, and no. 19, 1925.

[2] Jessup, W. A., "Current Practices and Standards in Arithmetic"; in *Fourteenth Yearbook of the National Society for the Study of Education*, part i, chap. viii. 1915.

of time allotment, we have still to decide upon the proper order of studies. This must be determined with due regard for the best possible economy in learning. Some points to observe are obvious. We have several different types of work to schedule. In some types the child sits very quietly; in other types he moves about. Much of the work is merely reading. Geography, history, civics, reading, literature, and physiology are mostly of this type. Other studies have but little reading but involve careful reasoning. Arithmetic and algebra are of this type. Then there are shop work, laboratory work, gardening, field trips, dramatics, and to some extent drawing, writing, painting, modeling, and singing, all of which involve more or less physical action.

There are certain other differences, too, that have a bearing upon program-making. Some of our action studies, such as drawing, painting, writing, and some kinds of construction work require a careful coördination of arm, hand, and finger muscles. Other studies, such as dancing, dramatics, shop, laboratory, and field work require the use of the large muscles of the body, and little in the way of refined coördinations of smaller muscles.

The problems of interest and fatigue. That these characteristics of school activities are significant in determining what a child can do through the day, or at least what he will be interested in doing, is obvious. Children do not apply themselves readily for a very long time to any one kind of mental or physical exertion. Change is very important, and without frequent change we see a flagging of interest and a corresponding flagging of effort. Whether or not this is evidence of fatigue in a true sense, either mental or physical, it is desirable that we learn all we can about the meaning of interest, effort, and fatigue. No exhaustive study of these phenomena is necessary, however, to prove that it is desirable to introduce variety, both mental and

physical, into a child's work schedule. The character of our school studies makes this possible.

It is not meant to suggest that the teacher should assume that the question of fatigue among children is to be dismissed lightly. One or two things we know. Children vary greatly in their ability to endure continuous mental or physical effort. This no doubt applies, whether by fatigue we have in mind the general feeling of weariness or ennui, or the feeling of being bored, on the one hand, or on the other depleted strength or the actual decrease in ability to do work. Experiments seem to show that what teachers have generally described as fatigue is very largely slackened interest or a general feeling of weariness, and not actual fatigue in the latter sense.[1] There is such a thing as fatigue, however, and in some children it is no doubt easily induced because of ill health, undernourishment, loss of sleep, sorrow, or overwork, and teachers should be on the alert for the symptoms. On the other hand, mere sluggishness or lack of interest is a thing we must not be too ready to yield to. The world is full of hard work, and some tasks are unpleasant. The only way to fortify against the tendency to follow the line of least resistance, which leads to mental as well as physical flabbiness, is to learn to stand up against tasks that are not especially interesting. In other words, we must train children to maintain a conscious command of their own energy.[2]

Rules governing work and rest. Having in mind that there is such a thing as true fatigue, which can be induced by overexertion, and that what will call for normal exertion

[1] See: Starch, Daniel, *Educational Psychology*, p. 169, for a résumé of experimental data on this subject. For an earlier treatise see: Offner and Whipple, *Mental Fatigue*.

[2] The young teacher is warned here against adopting a puritanical attitude, or overstressing discipline, or trying to "harden" the children, or assuming too much in the way of transfer of training.

in one child may call for overexertion in another; but having in mind also that effort varies with interest, and that children are sensitive to strain, distractions, and continuous effort, and that in general children do not hesitate to follow the line of least resistance in doing tasks, let us now consider what is the bearing of this on program-making.

Recalling the picture we have drawn above as to the nature of our studies, and how working at these studies affects the child, and knowing that a child becomes weary when he is kept in one position or has followed one line of mental activity for more than a few minutes, and that with this weariness comes a disposition to quit attending, we see that change is to be an essential characteristic of any good school program.

Change can be produced in more ways than one. We may shift from work to free play and back again, producing change in a large way, or we may shift from one type of work to another, or from one set of materials or problems to another, or from one method to another. We may shift from one posture to another, or from individual to group work, and so on almost indefinitely. In the room the eyes are focused on objects near by and on small objects. There is little chance for a free shift in attention from work to possible distractions. On the playground all this is reversed; even a change from indoor to outdoor work reverses most of this. Within the room we may shift from reading to writing, or arithmetic, or dramatics and get a sharp change in mental and physical activity. Even within the limits of one study we may often turn from one to another part of the lesson assignment and get change. For example, a silent-reading lesson may call for the *main features or ideas*, and then for the *details of some one section*, or for the *spelling of a selected group of words*, or for a written description of a picture or a character. In a recitation the teacher may shift

from oral to written work, in most studies, or from question and answer to reading and telling, and in endless ways introduce change that will relieve the strains that in time would produce weariness and ultimately true fatigue, and in any case inattention and flagging effort, and so poor results.

It is easy to introduce these ideas into program-making and into teaching. Our next question is: Is there a best order in which to effect these changes? The answer is: in part, yes. We should make extensive or complete change from work to play, and from indoor to outdoor activity, at intervals of less than an hour for little children and of not over an hour and a half for upper-grade pupils. We should shift from one to another type of studies and not put all hand work together, or all reasoning, or all laboratory, or all reading work in one place. Beyond this, owing to the shortness of our recitation and study periods, there is probably little danger of provoking fatigue or even weariness by the order of studies. It seems obvious, also, that too great a shift should be avoided, such as from free play to drawing or writing.

4. Typical programs

A proper program. Sample programs are presented below to illustrate the principle here set forth. It is clear that a program cannot easily indicate all that goes on in a room, or the details of the method of procedure, or the purposes that are to be attained. These must be regarded, however, as essential parts of the teacher's working schedule. They will not remain perfectly constant from day to day, or from subject to subject, but they are important features of the schedule. The order of studies or activities for each working group will be made clear for each day in the accompanying sample programs, as will the time to be spent on each.

It may be that in large schools the principal will have a program prepared, but it is also true that he will usually welcome suggestions from the teacher regarding many of the details; and the teacher should by all means master the essential principles of program-making.

A three-class program. A careful study of the program on page 213 will doubtless show a few slight violations of some of our principles. In the main, however, it represents a fairly good distribution of time and a fairly good order of subjects. Spelling might with propriety precede the arithmetic work early in the morning, ending the day with science.

In some cases certain alternations of subjects would be necessary. Perhaps the Monday, Wednesday, and Friday drawing periods might be devoted to domestic science and manual training. Physiology and nature study, if treated as separate subjects, might alternate in a similar way; and likewise history and geography in grade V B; and history and civics in grade VI A.

Taking the program as it is, it shows exactly what a given pupil is supposed to be doing at every moment of the day. Adequate study time is arranged for each lesson, and in nearly every case study immediately precedes recitation. There is, however, nowhere set apart any time for the supervision of study periods. This can only be made possible by a system of alternating some of the courses. For instance, the course of study could be so arranged that the fifth grade work in history could be taken by the two sections of the grade together, and, similarly, other combinations could be worked out which would make it possible to save time by having two classes recite together. There is no reason why grades V A and V B should not work together in physiology and geography. After the introductory work in these subjects one topic is no more difficult than another, and the

Program for a Room with Three Classes

Recitations			Study and Occupations		
Begin	Minutes	Classes	Grade V A	Grade V B	Grade VI A
9:00– 9:10	10	Opening Exercises—All			
9:10– 9:25	15	Reading — VI A	Arithmetic	Arithmetic	
9:25– 9:35	10	Arithmetic—V B	Arithmetic		Arithmetic
9:35– 9:50	15	Arithmetic—V A		Reading	Arithmetic
9:50–10:10	20	Arithmetic — VI A	Reading	Reading	
10:10–10:30	20	Writing			
10:30–10:45	15	RECESS	Play	Play	Play
10:45–11:00	15	Reading — V B	Reading		History and Civics
11:00–11:15	15	Reading — V A		History and Geography	History and Civics
11:15–11:30	15	History and Civics — VI A	Geography	History and Geography	
11:30–11:45	15	History and Geography	Geography		Grammar
11:45–12:00	15	Geography — V A		Language	Grammar
12:00– 1:00	60	NOON — INTERMISSION			
1:00– 1:15	15	Grammar — VI A	Language	Language	
1:15– 1:30	15	Language — V B	Language		Geography
1:30– 1:45	15	Language — V A		Physiology	Geography
1:45– 2:00	15	Geography — VI A	Physiology	Physiology	
2:00– 2:15	15	Physiology — V B	Physiology		Physiology
2:15– 2:30	15	Music and Physical Culture			
2:30– 2:45	15	RECESS	Play	Play	Play
2:45– 3:00	15	Physiology		Spelling	Physiology
3:00– 3:15	15	Physiology — VI A	Spelling	Spelling	
3:15– 3:25	10	Spelling — V B	Spelling		Spelling
3:25– 3:35	10	Spelling — V A		Arithmetic	Spelling
3:35– 3:45	10	Spelling — VI A	Reading	Arithmetic	
3:45– 4:00	15	Drawing			

Suggested Daily Time Schedule for One-Teacher Eight-Grade School [1]

Hour	Subject and Grades Reciting	Study Program by Groups and Grades			
		A Grades I, II	B Grades III, IV	C Grades V, VI	D Grades VII, VIII
9:00– 9:10	Opening Exercises [2] All				
9:10– 9:20	Reading A [3]		Arithmetic	Arithmetic	Arithmetic
9:20– 9:30	Arithmetic B [4]	Reading		Arithmetic	Arithmetic
9:30– 9:45	Arithmetic C	Construction	Reading		Arithmetic
9:45–10:05	Reading B	—Recess—		Reading	Arithmetic
10:05–10:30	Arithmetic D	Numbers	Language	Reading	
10:30–10:45	RECESS		RECREATION		
10:45–10:55	Reading C	Phonics or Nature Study	Language		History Civics
10:55–11:00	Phonics A		Language	History Civics	History Civics
11:00–11:15	Language B	Reading		History Civics	History Civics
11:15–11:30	Hist. Civics D	Reading	Geography	History Civics	
11:30–11:45	Hist. Civics C	—Recess—	Geography		English
11:45–12:00	Geography B [5]	Board Work		Spelling	English
12:00– 1:00	NOON		RECREATION		
1:00– 1:15	English D	Nature Study	Reading	English	
1:15– 1:25	Reading B	Drawing		English	Geography
1:25– 1:35	English C	Construction	Drawing		Geography
1:35– 1:50	Geography D	Construction	Hygiene (Nature Sty.)	Geography	
1:50– 2:00	Reading A	—Recess—	Hygiene (Nature Sty.	Geography	Physiology
2:00– 2:15	Hygiene B [5]	Sand Table [8]		Geography	Physiology
2:15– 2:30	Geography C	Reading	Spelling		Spelling
2:30– 2:45	RECESS		RECREATION		
2:45– 3:00	Spelling ABCD	Word Study			
3:00– 3:10	Reading A		Reading [6]	Library [6]	Physiology
3:10– 3:25	Writing [7]				
3:25– 3:35	Physiology D	Reading	Reading	Library	
3:35– 3:45	Reading B	Reading		Arithmetic	Library [6]
3:45– 4:00	Supervision of Study	Excused	Arithmetic	Arithmetic	Library

[1] This program is meant to be suggestive to one making a schedule for a one-teacher eight-grade school. It divides the day into twenty-four separate work periods. It shows what each grade is doing during each of these periods. It divides the pupils into four work groups, each group containing two grades. It provides each of these groups with from five to eight recitations daily.

The program is not intended to show all the resources of the curriculum in any grade, nor does it show the details of the correlations, combinations, and alternations that are possible and desirable in the school of this type. Through the following notes, however, some of these are suggested, and the resourceful teacher will find this program a suitable starting point for their introduction.

It is suggested that the number of recitations can be still further reduced in many schools where some of the grades are not represented or where certain grades contain very few pupils. Also, it will be feasible in most schools to conduct certain of the recitations on less than five days per week.

[2] Opening exercises will furnish opportunities for talks by the teacher, for group singing, for radio or victrola programs, for special programs given by groups of pupils, for forums conducted by pupils, and for talks by visitors. The aim here will be to develop a group spirit and a group consciousness of acceptable standards of conduct in the school. It will aim to stimulate interest in good music, in good books, in neighborhood affairs, in health and sanitation, and in games and dramas and stories and politics.

[3] Reading will mean many things in Group A. The beginners will at first work on phonics and word-and-sentence study, while Grade II will read many books. In all the reading work one grade may work at oral, while the other grade works at silent, reading. Often the division will not be on grade lines (see text above). In all the reading classes there should be a very wide selection of books besides the basic reader. This extra reading should sometimes be done in a way to supplement the hygiene, geography, civics, history, or even arithmetic. At times the reading lesson may make it wise therefore to omit the hygiene, or civics or history lesson on a given day.

[4] Where the children are drilling on tables it is possible to permit them to hear one another recite. Grade IV can direct the reciting of Grade III, giving the teacher opportunity to supervise other work in the room, retaining only a general oversight over the recitation.

[5] Geography and hygiene and history are subjects in which the work can alternate by years with good effect and little if any loss.

[6] The library period, and for Group B one reading period, may well be given over to project work. Let the project be in line with the child's interest regardless of the school subject it touches, only see that it is worth while and that the school has facilities for the child's work on that project. It may be solely a library type of work, such as a study of the customs of the Chinese people. If a shop or an extra room is available, the interest may be in making something.

[7] In writing all grades may work together, the teacher giving different groups the most of her time on different days. Correlation with English and all other subjects must be effected, if results are to be expected. It would be possible, and in some cases desirable, to introduce music or drawing in place of writing on one or two days per week.

[8] The sand table could be used to good advantage, the teacher supervising the work while conducting other recitations. Similarly she could handle construction and drill work and word study. By this means fewer recitations are effectively offset by more supervision.

same is true of upper grade work in arithmetic and history.

Program for a rural school. In a one-teacher school certain combinations and alternations are practicable because of the very small numbers of pupils in each of the grade groups. The instruction in reading could not be alternated for grades I and II, but the groups being small the recitation work can be handled almost individually. The accompanying footnotes for the program presented on page 215 will make clear some of the details of correlation, combination, and alternation that can be applied in programming the work for such a school.

5. How to use the program

The program should be printed on a large stiff sheet of paper that can be hung in an appropriate place in the room. If the Tuesday–Thursday program differs seriously from that of the other days of the week, then have the Tuesday–Thursday program on one side of the card, and that for the other days on the other side of the card, and appoint a monitor (some one who shows that he knows how to live up to a program) to turn the card each evening just before school closes. At the outset, when the program is explained, it may be well to have each child make a copy of his own schedule and keep it on his desk for a few days until he becomes accustomed to it.

The beginning teacher will find it desirable to adhere strictly to the schedule, for the following reasons: First of all, it will be a constant check on her success at making her daily lesson plans; second, it will prevent her giving an undue amount of time to the subject she happens to be most interested in, and so robbing other studies of their proper amount of time; third, it will teach the children to make systematic preparation for all their work, and so establish useful work habits.

6. Chapter summary

Here we have set forth: the problems essential to the planning of the day's work; the fundamental principles involved in its organization; the practical application of these principles in typical situations; and the need for adhering to a specific program of work.

We have seen the definite arrangement of subject-matter, of recreation, and of recitations; the reasonable distribution of time for the various studies; the order in which studies shall appear on the program; — all as practical issues which every teacher must meet. We have seen, too, that underlying the solution of these are the fundamental questions of the relative value of studies; the proper distribution of work and play with respect to the child's energy; and the influence of some systematic distribution of time and strength upon the development of sound work habits.

The object in program-making, then, as illustrated in the typical programs here presented, is to establish order in the day's work and to economize in time and energy. To do this, the more formal studies are placed at the hours when the child's energy is at its maximum, and the content studies at the hours when less interesting work would cause interest to flag. If these practices are adhered to it is believed there will be little occasion for worry about the dangers from overwork at school. What is most essential is that the teacher have a clear idea of the aims to be set up and of the importance of homogeneity in any working group of children, that children should have much change in mental and physical activity to prevent weariness and loss of interest, and that when properly arranged the nature of our school studies makes such change possible and easy.

QUESTIONS FOR DISCUSSION

1. What does the making of a daily time schedule have to do with the determination of the relative values of studies?
2. Make a list of the factors to be dealt with in making out a daily program.
3. How does the time allotment in your own school compare with that for the group of cities represented in Tables V and VI?
4. In Tables V and VI, notice the relative amount of time given to recess. Does it seem unreasonable that we should expect some educational return for that time? What might be the nature of that return?
5. Explain the difference between form and content studies, and state

which, in general, should receive most time in the day's program. Why?

6. In your own school how many minutes per week do you devote to form studies, to content studies? Figure out the division in Table VI, and compare with your own allotment.
7. What has the study of fatigue to do with the order of the studies on the program, with the length of recitation period, and with the frequency of recreation periods?
8. In the above three-class program (Page 213), figure out the total amount of time devoted to arithmetic. Compare this with the amount devoted to English (reading, writing, spelling, grammar, and language) and with the amount devoted to science.
9. In this program suggest the changes necessary to place spelling immediately after opening exercises. What advantages if any would come from such changes?
10. Are music and physical culture placed to best advantage on the program? Why? What percentage of a child's time is devoted to spelling?
11. What advantage is there in a plan of alternating subjects?
12. In the above program for a rural school (Page 214), figure out the amount of time in hours a child would spend on arithmetic from the time he would enter grade one until he would finish grade eight, supposing the year to be nine months long. What percentage is this amount of the entire number of working hours the child would have been in school during the eight years?

PROBLEMS FOR STUDY

1. It has been suggested in this chapter that grade groups need not determine grouping for recitation purposes. From any of the recent books on tests, or from recent survey literature, or better still from tests you have given, examine the results of tests in a selected room and suggest a classification of the children for study and recitation purposes. A room containing two or more grades would be desirable. If possible, check the results of a test in reading with test scores in other studies. Would suitable classification in one study correspond to suitable classification in other studies? Compare with the program of studies now in use in the school studied.
2. Select a program of a rural school in which there is a large number of grades and in which the number of recitation groups is very large, and try to work out a grouping such as is suggested in the sample programs presented in this chapter. Apply the principles of alternation, combination, and correlation suggested above. If this could be an actual project for a class it would be worth while to the class and to the school as well.

3. Make a comparative study of time allotment in a group of selected schools. Check results with figures presented in Tables V and VI. In selecting schools for study, take account of type of school, type of community and pupils, curricula, organization of materials, methods of instruction, size of classes, and types of buildings. Does such an intensive study show that variation in time allotment from school to school is desirable? Determine what factors call for variation from typical distributions.

REFERENCES FOR ADDITIONAL READING

Ayers, Fred C. *Studies in Administrative Research.* Board of Education, Seattle, Washington, June, 1924.

Ayers, Fred C. *Time Allotment in Elementary School Subjects,* U.S. Bur. of Educ., *City School Leaflet,* no. 19, 1925.

Bagley, Wm. C., and Kyte, George C. *The California Curriculum Study.* University of California Printing Office, 1926.

Cubberley, Ellwood P. *The Principal and His School,* chap. IX. Boston, Houghton Mifflin Co., 1923.

Lathrop, Edith A. *The Organization of the One-Teacher School.*

Reinoehl, Charles M. *Analytic Survey of State Courses of Study for Rural Elementary Schools,* United States Bureau of Education, *Bulletin* no. 42, 1922.

Sears, Jesse B. "Time Allotment in the Schools of Salt Lake City"; in *Educational Administration and Supervision,* Mar., 1916.

Strayer, Geo. D., and Engelhardt, N. L. *The Classroom Teacher,* chap. X. New York, The American Book Co., 1920.

State courses of study for the following States will be found to contain many excellent suggestions: Washington, Minnesota, Wisconsin, West Virginia, Missouri, Iowa, North Carolina.

U.S. Bureau of Education, *Rural School Leaflet,* no. 10, Feb., 1923.

Wilson, H. B., Kyte, Geo. C. and Lull, Herbert G., *Modern Methods in Teaching,* chap. XIII. New York, Silver, Burdett & Co., 1924.

CHAPTER XIII

THE CLASS STUDYING

Outline of Chapter

1. The problem: The importance of right methods — Outside problems very real — The meaning of study — Intelligent study — The function of these methods in practical affairs — Diagnosing study practices: Symptoms — Diagnosing study practices: Causes — Where these steps lead us.

2. The teacher's attitude toward the problem: The teacher's problem — Three problems in the learning process — The first step, a clear aim — Making the assignment — Considerations in assignments — The second step, to provide a motive — The third step, how to find and to organize materials — Teaching how to study — Purposes of such instruction illustrated — The fourth step, development of a critical attitude of mind — The critical attitude illustrated — The fifth step, to provide right conditions of work — The ultimate aim good work habits.

3. Summary — Questions — Problems — References.

1. The problem

In our discussion of what is to be taught in the school, special emphasis was laid, first, upon the wide variety of knowledge and activities to be included; and second, upon the importance of so organizing these materials that their connections with one another and with the common affairs of life outside the school would be felt by the child. How to study is a question of how to work intelligently at each of the numerous and widely different tasks which the modern curriculum presents.

The importance of right methods. That the problem of how to study is important is almost too obvious to warrant any reference to it here, were it not for the fact that its significance is so commonly overlooked in practice. The fact that until very recently the school did not teach children how to study, but merely heard them recite what they had learned in their own way, does not mean that there was no need for such teaching. It is true that a few boys have learned to swim by being thrown into the water and then

left to get out alone, and possibly a few have learned to study and to think clearly by being assigned a lesson and then left to get it or remain after school. But just as the boy who learns to swim under such pressure does not use a single scientific stroke, so investigation has shown that children who have not been taught how to study intelligently do not use proper methods of study.[1] If this be true, and it unquestionably is, then teaching a child how to work at a task is a question of very first importance, and should be accepted by the school as one of its chief problems.

Outside problems very real. The extent of this importance is not confined to the schoolroom. The study of problems outside of school is as real as is the study of books, and not only should the two not be separated in the teacher's mind, but it should be her particular duty to lead her pupils to realize that applying good methods to sweeping, running errands, setting the table, doing chores, making a garden, buying and selling goods, caring for one's earnings, being kind and courteous, and running the affairs of the community, is precisely the same thing as applying good methods to school lessons. This is one of the things that is meant when we speak of tying the school up to community life. The tying should have to do with methods of work as well as with subject-matter.

The meaning of study. If we are to undertake the management of the study process, we must first of all have a clear notion of what we mean by study, or in other words we must have a clear teaching aim.[2] We commonly think of study as work, but too often make no further analysis of the term than that. If we do we think of memorizing as being almost synonymous with the word study. But if

[1] See Earhart, Lida B. *Systematic Study in the Elementary School*, Teachers College Contributions, no. 18. (1908.)

[2] See p. 26 ff.

we recall the various aims of education,[1] and the large number and wide variety of studies offered in the curriculum, we at once see that study is by no means a matter of merely memorizing facts.

Intelligent study. Let us enumerate some of the things the child must do when he studies intelligently:

1. He must observe accurately, otherwise he could not read his music, or his geography, or write an accurate descriptive theme, or dance, or write, or become acquainted with birds and flowers. Here we are concerned with the use of the senses of sight, hearing, touch, and in a limited way with those of smell and taste.
2. He must attend quickly, and be able to concentrate attention upon the question in hand, otherwise he is not studying, but merely dawdling, he is only passive when he should be active and aggressive.
3. He must of course remember the things he observes and attends to.
4. He must compare and differentiate objects and facts, that is, he must see relationships, and that not only between objects of the senses, but also between ideas, and between things absent as well as things present. It is a matter of bringing the imagination to bear upon the things experienced.
5. He must be able to state clearly what he has thought or observed, that is, distinguish the main from the subordinate facts and ideas, and put his thoughts in good form.

The function of these methods in practical affairs. These are a few of the most important processes involved in study, and it is scarcely necessary to show the extent to which each of these is essential to real success in life. The touch of the surgeon must not fail him when he is cutting human tissues, and the physician must know what he hears when listening to the breathing or heartbeat of the patient. Musical instruments would remain silent, and the landscape unpainted, were it not for the trained senses of touch, sight,

[1] See Summary to Chapter I.

and hearing. How much the work of the sculptor and the artisan is dependent upon the senses of touch and sight! Imagine the engineer who could not detect a defect in his machinery by its sound, and who could not single out and concentrate his whole attention upon the faintest irregularity in the steady hum of his engines. Imagine the inventor, the musician, the painter, the sculptor, the scientist, or the man of affairs, without imagination, and without memory that retains and reproduces the right things at the right time. The purchaser of stock, of cloth or paper, who could not detect slight differences in quality would be a failure. The lawyer, the statesman, the journalist, the administrative officer in any line would be helpless in the midst of the greatest abundance of facts if he had not the faculty of organizing those facts and stating them clearly.

Teaching a child how to use his senses, how to reason, how to memorize, how to distinguish fact from fiction, is quite as important as teaching him facts, and indeed should never be separated from it; for after all, how we get facts, how we develop skills, determines very largely what we shall be able to do with facts and skills when we get them. The problem of managing the study of children in school, then, is the problem of training them in these processes, to the end that they may be able to use their knowledge and skill in the further accumulation of that greater knowledge and skill which makes for leadership and marks the educated man.

Diagnosing study practices: Symptoms. With this conception of study, and of the importance of teaching children right methods of study the teacher may wisely ask: How may I learn to recognize right and wrong practices in my room? Like a physician she must learn to detect the symptoms of wrong procedure. These symptoms are numerous,

either as we observe pupils at study or as we examine the results of their study as these appear in the recitation.

1. Symptoms of wasteful procedure. As we observe pupils at study or when they are beginning the study period we note such matters as the following:

1. Many pupils do not begin work at once. Some look about, and others daydream or dawdle and finally move reluctantly to the task.
2. Some study by spurts, working a bit and then looking about and sighing in a restless fashion, as if anxious lest they may not be able to remember or understand what they have read. They show a lack of poise and self-possession.
3. Some are at work on the wrong materials and do not know it, or they are taking up the parts of the assignment in the wrong order.
4. Some are obviously discouraged, and seem to realize that they cannot do the work and that failure is certain.
5. Some clearly do not know what to do and appear anxious to ask questions.
6. Some seem to be struggling with some detail, such as a new word, or a long sentence, or a new idea.
7. Some are constantly distracted by noises, or by sunlight on their desks or by some one trying to communicate with them.

2. Symptoms of wrong procedure. As we watch a recitation we are able to see symptoms of other disturbances which we might have forestalled had we understood better in advance. This is looking backward, perhaps, but it should help the teacher to anticipate the pupil's study difficulties. We get many such reactions as the following:

1. The pupil says: "I didn't know we were to have that to-day."
2. He gives an answer that is based upon an entirely erroneous understanding of a word or phrase in the lesson.
3. He makes an effort to give precisely what the book says and, not being able to quote, cannot give a summary.
4. He attempts to "bluff through" by talking or asking questions.
5. The pupil has evidently not been able to use intelligently, or

has neglected to use the index or table of contents of his book, and so is lost in his search for certain facts.

6. He fails to bring to class books or other matter needed in the recitation period, or brings them in such a muddle as to require undue time to make proper use of them.
7. When asked how the facts brought out in the lesson could be used in some situation at home, or in life outside the school, he seems never to have thought of such an application.

The experienced teacher will be able to add to both these lists, and to place the name of some pupil after each of the above cases as a good illustration.

Diagnosing study practices: Causes. We may think of the above as symptoms. Those in the first list indicate that the child *is not* proceeding wisely in his study, those in the second show that he *has* proceeded unwisely. As a physician studies symptoms with a view to getting at causes, so the teacher must remember that the true cause of poor results or of wrong procedure lies back of both. The child does not know how to recite because he did not know how to study.

Behind these symptoms are causes that ought to be removed as soon as possible. Many of the above cases would be as typical in one kind of work as in another. If a child can learn to overcome them for one study we may reasonably hope that he will have overcome them for many studies, and in a wide variety of study situations as well.[1]

1. Ignorance and wrong motive. There are thousands of adults, as well as children, who do not appreciate the value of time. They are late to their work, they stop work at the slightest excuse, and they seem never to charge themselves

[1] This depends, of course, upon the way in which a child is taught to overcome them. It is easy to teach a child how to use a dictionary, but not so easy to train him so that he will always think to use it when it would be the best thing to do.

up with the loss of this time which, rightly used, might have produced knowledge, skill, work completed, money, and, best of all, self-respect and satisfaction with success attained or effort made. This is a form of leakage all through our school work, and children are entirely unconscious of its presence or its significance. The cause back of the symptom is this unconsciousness of the loss and of the meaning of it, and of the pleasure and success that would accompany the opposite practice.

Similarly, we could find the cause that lies behind each of the other thirteen symptoms listed above. Taking them in their order, we would readily see that in number two of the first list the pupil is moved by fear, which is a wrong motive. He must be helped to independence and to self-assertion. In number three the child takes up the wrong work because he does not have a real grasp of the task. He is after something in general but nothing in particular. His assignment failed to give real guidance. The fourth case is discouraged because he is failing. There may be many reasons why he is failing. These reasons must be found; they are causes, and they must be cleared away by good teaching. The fifth case lacks orientation, and will lose much time. He does not know how to direct the fine energy he is displaying in his aimless movements and questions. The sixth case is one who does not know how to get over a word difficulty. In five minutes he could be taught what to do in *all* such cases. He doesn't know where to go, or how to use available helps. The seventh case is one that needs different surroundings.

2. Poor teaching. In our second group of symptoms we can see back of the first case a lesson assignment that was not definite, or at least that was not mastered. In the second case the child guessed rather than go to the dictionary. In the third case we have a child who is trying to

become a successful parrot. It is surely the teacher's responsibility to train this child to *think*, as well as to *remember*. The fourth case probably represents laziness and indifference mixed with love of show. It is an example of lack of understanding or of interest in systematic effort. The child is acquiring habits of slovenliness that will be very harmful. In the fifth case the child did not know how to use the simple tools of research. In the sixth case the child had no sense of order and system in his work. Probably his dress and speech are much like this. The seventh case is a small bookworm who hasn't learned what knowledge is for.

Where these steps lead us. Such an examination of symptoms is step number one in a search after the true causes for poor study. We might take still further steps. The teacher must take further steps, and they will lead her back into the native traits of the child, into his habits and attitudes, into his home life, and into his previous training. These are the causes. Wrong education or no education has made gaps, or has produced wrong attitudes, habits, beliefs, and knowledge. It is in these habits and attitudes as well as knowledge that we must effect a change in the right direction. Since a child will have so much need for a real mastery of the best methods of study the teacher should not stop until she has found out and, as far as possible, removed the causes of study weaknesses.

2. The teacher's attitude toward the problem

The teacher's problem. The teacher looks at the many sides of this problem, and then at the coming examinations which her pupils must pass for promotion, and, knowing that she will be judged very largely by the results of those examinations, raises the question as to whether children can be taught how to study more intelligently than they do,

and if so, whether it will pay to take the time to do it. And so she hesitates.

A poor teacher may wisely hesitate, for in accepting such a program she is to a large extent laying aside the use of fear as an incentive to study. She can no longer say: "Take to page 16, and remain after school if you fail to get the lesson."

A really professional teacher looks for more permanent results of her work. She aims at successful examinations as incidental to the intellectual development of her pupils and not as the final end of her teaching. Consequently she is not only willing but anxious to face her real problem, the first step in which is teaching the child how to study his lessons.

Three problems in the learning process. In the management of the learning process there are three fairly distinct problems to be dealt with. First, the assignment of lessons; second, the study of lessons; and third, the recitation of lessons. This division of the teaching problem into three parts does not mean that the time is to be divided equally among the three, or that it is not sometimes necessary to shift from one to the other and back again during a recitation period, but it does mean that there are three distinct functions which the teacher must recognize and learn to direct. As the master carpenter must lay out with care the work that is to be done by his apprentices, so the teacher must learn to give specific directions for study that is to be done by the class in her absence.

In this chapter we are concerned with the management of study, which includes two of these problems, viz., how to make assignments, and how to direct children in economical methods of study.

The first step, a clear aim. In teaching the child how to study the first step is to make clear to him the problem he

has to solve. This is the function of the lesson assignment, a function more often badly performed than almost any other function in teaching. To know specifically what you are going to do is of first importance. If you are looking for an answer to a question, then information that does not answer that question is quickly discarded, and that which does answer it is quickly recognized. To read a page merely because the teacher assigned that page is not to look for anything in particular, and at best puts the child in a receptive rather than a critical attitude of mind. He takes what the page says as final authority, and asks no question. A proper assignment is not merely quantitative; it must set up a specific problem for the child to solve — something definite to observe, to discover, to describe, to relate, to make, to imitate, to explain, to compare, or to remember.

Making the assignment. How to make such an assignment, that is, how to make each lesson stand out in the child's mind as a problem to be solved or as something definite to be done, is by no means a simple matter. To make the aim of the assignment clear the teacher must keep in mind two things: first, the fact of individual differences; and second, the wide variety of problems which the modern school program presents to the child. What has been said of individual differences [1] applies in a very important way here. In the study of *Evangeline*, for instance, no two pupils will have the same interest in the poem. Some will be interested in the chief characters, some in the old legends upon which the story is based, some in the scenes described, some in the literary form. If a study of Evangeline as a character is the lesson, no two pupils will have the same equipment for the study. Some will be familiar with a wide range of characters in fiction with whom Evangeline may be com-

[1] See Chapter III, section 6.

pared or contrasted, and some will know but few. And so on, in numberless ways, both in native interests and in previous training and experience, the pupils will differ from one another.

The complexity of the teacher's problem seems almost limitless when to this we add the wide variety of lessons she is called upon to assign. Nature study, writing, spelling, shop work, singing, and arithmetic are not much alike. Nature study is likely to involve careful observation, writing aims at particular muscular coördinations, spelling is largely memorizing, arithmetic may emphasize either memory or reason, or both, while shop work and singing are still different. Psychologically, almost every possible variety of problem presents itself where the teacher is in charge of several grades, or studies.

Considerations in assignments. A full understanding of these two facts (individual differences and variety in learning problems) will help the teacher to realize that assignments must be made, first, in terms of the nature and training of the individual, and second, in terms of the particular mental or physical activity involved. She cannot talk to the "class," or to the "average pupil"; she must talk to each pupil, and that in terms of his interests and knowledge of the subject in hand. This means that her own grasp of the subject must be very broad. If it is a case of memorizing a poem she will have to answer two questions for herself: First, what do the various pupils know about the poem, and what kinds of interests are they likely to have in studying it; and second, what is the best way for them to memorize it. She can answer the first question only if she is intimately acquainted with each pupil, and the second only if she knows something about the psychology of memorizing. The influence of maturity, of repetition and its frequency, of rhythm, of committing part by part or by wholes, are ques-

tions she must be able to answer before she can really make the aim of the child's study specific.

Again, if the particular activity is some form of muscular coördination, such as writing, drawing, painting, or muscular work, the aim is not clear when the teacher hands the child a copy or model to work by. How to hold the instrument, position of the body, repetition of movement, speed, amount and periods of practice, and other detailed questions must be determined before the child can know exactly what he is to do. The aim will usually be a combination of two or more of these processes, as memory and observation and reason, or observation and muscular coördination. It is not clear to the child just what he is to do until he knows exactly *how* it is to be done. The *how* and the *what* in teaching are practically inseparable.[1]

The second step, to provide a motive. The second large problem in teaching children how to study is that of providing them with a motive for study. Before assigning a lesson the teacher should ask herself why John or Mary should want to study that lesson. The question of motives has been discussed at length in Chapter IX, and some of the principles set forth there have a direct bearing upon the management of study. Certainly fear of punishment would be ruled out here; and our approach would be from the standpoint of trying to create in the child's experience a real need for the new information or skill to be got from the lesson assigned. People think only when something perplexes them, when their knowledge or understanding of a situation is incomplete; and they work aggressively at the gathering of facts or the acquiring of skill only when the facts or skill somehow fit into their partially understood or half-mastered situation.

That means, then, that the child must not only see clearly

[1] See Chapter II, section 2.

the aim of his study, but he must feel that the achievement of that aim will help him to a fuller explanation of things now but partially understood. To do this an endless variety of little devices will be brought into play. Questions should be raised by the teacher, and the pupils should be stimulated to raise others. Special assignments to individuals or to separate groups, each covering a definite subordinate problem, can often be made. Pupils may frequently be asked to suggest where to find materials, how best to study the lesson, or the best form of report to make, the object being to put the child on his own initiative as far as possible, and to stimulate an aggressive attitude of mind. Only if questions are raised in the child's mind will he be able to discover what the new information or skill will do for him, and only when that discovery is made will he feel the necessity of working to get it.

The third step, how to find and to organize materials. Once a child knows exactly what he is to do, and has a motive for doing it, the next question is where are the materials to work with. In the elementary school it will often be true that all the child needs will be the page or two in his text. Because this is so often true for the immediate purpose in hand, the teacher frequently neglects to teach the child how to find and use other materials which bear directly or indirectly upon the lesson in hand. The next thing to knowing a fact is knowing how to find it and how to reinforce it with other related facts.

One of the school's greatest sources of waste is, and always has been, the teaching of facts in isolation. The fact learned from the geography is more or less isolated, so far as its real meaning for the child is concerned, until it has been found in some other relations. The bare fact that St. Louis is a large city at the confluence of two great rivers is of no significance, and will be forgotten unless the child learns more

than that. Now, the question is, how to prevent him from being satisfied with merely memorizing the fact from the printed page, and how to equip him with facilities for so vitalizing that fact that it will have more than a verbal significance in his memory. There are numerous pictures, guidebooks, maps, and gazetteers, as well as cyclopædias, railroad time-tables, and the United States Census Reports, from which the child could learn how large St. Louis is in terms of its railroads, its industries, its population, its area, the number of churches, schools, parks and playgrounds, public libraries, and museums. If the lesson has to do with the location and size of St. Louis, it is not only worth while to study its size in all these terms — since at every turn the question of why so many railroads, parks, industries, is raised — but even more important that the children become familiar with these sources of materials and how to use them.

Teaching how to study. College librarians constantly complain that the entering freshman does not know how to find anything outside of his textbook lesson. Not only should the elementary school teach the use of the common reference materials, but it should send the pupil to the high school with firmly fixed habits of using them. This will involve a knowledge of how to use an index and a table of contents, two simple tools which will save an almost endless amount of time and conduce to clear thinking. Nor is all the reference material to be found in books, maps, and pictures. The museum is often available, with the very richest materials for proving and illustrating things learned from books, and best of all there is the physical and social world outside which becomes an open book to those who learn to read it. Why study directions, rivers, islands, lakes, drainage systems, animal and plant life, and industries from books alone, when the real things may often be investigated at

first hand only a stone's throw from the classroom window?

How to find materials brings the child up against the question of how to select and organize them. If, in connection with a given lesson, the child is asked to read another book or article, he must be taught to read with definite questions in mind, and to write down the ideas or facts which answer his questions. Some definite training in this is necessary. How to take notes, how to pick out the gist of an article or to make an abstract of it, are things that should be taught, for they are essential to systematic methods of study.

Purposes of such instruction illustrated. One could readily make a list of points or aims to be kept in mind as a means of developing the child's facility in study. For example:

1. The right use of time. Train the child to make every moment of time count, and count for something done in accordance with a plan.
2. Applying system. Orderly procedure in study is most effective; as a result of it, effort is not squandered. Let a child form the habit of listing the steps by which he expects to do his studying of a given lesson. Having done this, let him consider in what order those steps may best be taken.
3. Mastery of tools. Drill on the use of catalogue, dictionary, indexes, tables of contents, reading maps and charts, encyclopedia; with emphasis on using them every day, is important.
4. Setting a definite aim. Children too seldom study with a clear idea of just what they are to get from a lesson.
5. Applying what is learned. Children must learn that they really do not know a thing or possess a skill unless they can turn it to account in a new situation.

These points supplement what was said above on intelligent study. If we keep these ideas constantly in mind as we deal with children, and keep these points before the chil-

dren as goals, it seems reasonable that in time habits of intelligent study will be fixed and that the result of their application will be a broader understanding of how to study.

The fourth step, development of a critical attitude of mind. Whatever skill a child may develop in collecting facts under the teacher's directions, he will ultimately be called upon to do his own selecting, and to act in terms of the values he places upon the facts he finds. Ability to discriminate the false from the true is of first importance, and will only grow with practice in making such discriminations. School children frequently cite their book as proof of a statement. The reason they have learned to rely on the book is because they have been permitted to do so. The teacher has called upon them merely to recite the facts contained in the book, and not to test those facts for their true worth. This is not only not teaching the child one of the most important elements in the study process, but, by neglect, it is fastening upon the child an attitude of mind that is positively harmful. It makes him a worshiper of the printed page, and trains him not only to trust every author he reads but to be content with the ideas of others.

The critical habit illustrated. The opposite habits are what should be aimed at. The child must take a positive, instead of a passive, attitude toward what he reads, or hears, or otherwise senses. To establish these habits children should not be held to one single book in any subject. Many readers, histories, geographies, arithmetics, will be better than one. If there is not time for each child to read two or three books, then assign lessons in three books and divide the class into as many groups, assigning a different book to each group from which reports will be made as to what is said on the subject in question. Again, after the geography class has studied what a couple of texts have to say on drain-

age, take the class to a near-by field, where they may verify the statements read. Occasionally books will differ on a question. That is an opportunity to teach the class how to find out which, if either, is right. Children study history and civics, and leave school supposing that our form of government is the best yet evolved. The constitution, the state laws, the city ordinances, are held in awe, and the officers are looked upon as different from other people, largely because the textbook facts about these matters have never been questioned. Children should be permitted to see how the laws and officers they read about play a part in their own community life, and this they will not do unless they are trained to go to other books and to things themselves as other sources of knowledge, and to note carefully the points of agreement and of difference which the various sources reveal.

The fifth step, to provide right conditions of work. Finally, in addition to giving specific directions for work, right conditions for carrying on the work must be looked after. Needless distracting noises inside and outside should be guarded against; the seats or tables should be made comfortable with respect to position, temperature, and light; a regular study program must be worked out, and easy access to sources such as have been mentioned above must be provided for. These are all a part of training in systematic orderly methods of work. When the time comes to study spelling, children should be taught to clear their desks of all other material and to place before themselves just the things they expect to use in the study of the spelling lesson. This is really the first step in fixing attention upon the spelling lesson, and the first step in clear and undisturbed thinking.

The ultimate aim good work habits. The ultimate aim of the teacher is to fix these various steps in the form of good

work habits. Children must develop a respect for accuracy in general. They must learn how to begin new tasks with care, and to apply system in their procedure. They must accustom themselves to the use of the dictionary and other common reference materials. Not only must the child be taught how to study, but he must be watched constantly to see that he uses correct methods at all times. The laws of habit formation apply here as elsewhere, and the teacher must be constantly on the alert for lapses from the best methods.

Most certainly all this cannot be accomplished in the lesson assignment. The assignment must be followed up by careful supervision during the study period. It is impossible to do this in an ideal way in a one-room school, yet much can be done if the teacher trains herself to see a pupil's needs when he is studying. The common mistake made in supervision is that of telling the child too much. It is far better to raise questions in his mind that will provoke thinking in the right direction. He must be kept on the initiative always, for otherwise he is not really studying. We must not train children to go groping through the woods with a vague notion that something will stick to them; we must train them to go in search of something, and that something must be as definite in their minds as it is possible to make it. It is not only facts, and clever recitations, but also how to find, to verify, to evaluate, and to use these facts that is ultimately important in the child's education.

3. Chapter summary

Teaching the pupil how to study has been treated here as a problem in management because that is mainly what it is. The importance of right methods of study, when they are extended to all kinds and aspects of school work, and correlated as far as may be with outside activities, has been pointed out, as have the actual steps in the study process.

The proper attitude for the teacher to assume toward the three phases of the teaching process — assignment, study, and recitation — has been explained, and concrete suggestions offered for managing the individual and the class with respect to each.

As everywhere in management, the emphasis here is first upon a clear aim. The child must know exactly what he is to do. Second in importance to a clear aim is a real motive for study. The assignment must create actual problems if we expect an aggressive attitude on the part of the pupil. Third, how to find and organize materials that will solve these problems must be made clear. But this is not all, for proper management of study must result finally in critical attitudes toward facts, and in sound habits of work. These can only result from actual practice in comparing sources and in verifying the facts of the book by checking them against facts found outside the book.

QUESTIONS FOR DISCUSSION

1. In what important particulars were you taught how to study while in the elementary school? Explain any important ideas that you regularly apply in your own present methods of study. Where did you get those ideas? Could they have been explained to you in the elementary school?
2. What do you mean by study, and why is it important that we learn how to study systematically?
3. What are some practical difficulties in the way of teaching children how to study?
4. Before you can teach how to study you must of course know how yourself. Suppose you have assigned a spelling lesson of three new words in grade three. How would you explain to the class how to study that lesson? Do you know any books or articles that explain the best method of studying spelling? Are the directions they give based upon the results of scientific study or merely upon opinion?
5. If the lesson being assigned is a lesson in number combinations, as the multiplication table of three's, state specifically the aim you would try to set up in the minds of the pupils as the thing to be accomplished in their study. Can you mention any literature on the question of how to memorize?
6. What are some of the practical difficulties in the way of making the aim of a lesson clear to all pupils in a class?
7. What is meant by providing a motive for study? How would you provide a motive for the study of a spelling lesson?
8. How soon should a child learn to use the dictionary? How would you teach the use of the dictionary?

9. Explain how you would assign a lesson on the landing of the Pilgrims. What questions would you raise for the class to answer, what materials would you have them use to supplement the text? Would your assignment provide a real motive for study?
10. Explain how you would train children to be critical of what they read? How would you expect to teach them respect for accuracy?
11. What advantage is there for teaching how to study in:
    (*a*) the use of field trips;
    (*b*) special assignments and reports;
    (*c*) abstracting articles;
    (*d*) reporting on things seen or heard;
    (*e*) verifying statements by comparing authors.

PROBLEMS FOR STUDY

1. Prepare copies of the following questions, submit them to classes of pupils in grades 3, 6, and 8, and tabulate and study the results. On the basis of the replies write a prescription for teaching how to study.
    a. How do you study?
    b. Explain fully how you studied your reading lesson.
    c. Explain fully how you studied your spelling lesson.
    d. Explain how you studied your nature study or geography or science lesson.
    e. Do you have a regular time for studying each of your lessons?
    f. Does your arithmetic work help you in your play, or in the things you make or do at home? If so, give illustrations.
    g. How can you tell when you have studied your lesson enough?
2. Write out an explanation and illustrate how the prescription for intelligent study presented above would apply in specific studies.
3. Visit classrooms and observe study groups, and write down what you see that seems to indicate that the study procedure is good or that it is poor. Prescribe briefly what you think should be done in each case to correct wrong procedure, and show how the right procedures might be applied in other studies, or in play or work life outside of school.
4. Visit classes that are reciting, and list all the evidences you can detect that show that any particular pupil did not use good study procedure. Prescribe as in 3 above.

REFERENCES FOR ADDITIONAL READING

Bagley, Wm. C. *The Educative Process*, chap. xxi. New York, The Macmillan Co., 1905.

Davis, S. E. *The Work of the Teacher*, chap. viii. New York, The Macmillan Co., 1918.

Dewey, John. *How We Think*, pp. 1–28. Boston, D. C. Heath & Co., 1911.

Earhart, Lida B. *Teaching Children To Study*, chaps. v, vii, viii. Boston, Houghton Mifflin Co., 1911.

Hall-Quest, A. L. *Supervised Study*, chap. vii. New York, The Macmillan Co., 1911.

Holly, C. E. *The Teacher's Technique*, chap. xiii. New York, The Century Co., 1922.

Kitson, H. D. *How to Use Your Mind*, chaps. ii, v, vii. Philadelphia, Lippincott Co., 1916.

McMurry, F. M. *How to Study, and Teaching How to Study*, chaps. ii, xi. Boston, Houghton Mifflin Co., 1909.

Minor, Ruby. *Principles of Teaching Practically Applied*, chap. x. Boston, Houghton Mifflin Co., 1925.

National Society for the Study of Education, *Eighteenth Yearbook*, part ii. Bloomington, Ill., Public School Publishing Co., 1919.

Strayer, Geo. D., and Engelhardt, N. L. *The Classroom Teacher*, chap. vii. New York, The American Book Co., 1920.

Strayer, Geo. D., and Norsworthy, Naomi. *How to Teach*, chap. v. New York, The Macmillan Co., 1917.

Thomas, Frank. *Training for Effective Study*. Boston, Houghton Mifflin Co., 1922.

Whipple, G. M. *How to Study Effectively*. Bloomington, Ill., Public School Publishing Co., 1916.

Wilson, H. B., Kyte, Geo., and Lull, G. H. *Modern Methods in Teaching*, chap. xv. New York, Silver, Burdett & Co., 1924.

Wilson, H. B., and Wilson, G. M. *Motivation of School Work*, Boston, Houghton Mifflin Co., 1916.

CHAPTER XIV

THE CLASS RECITING

Outline of Chapter

1. Nature and purpose of the recitation: Conducting recitation the real test of teaching skill — The broader meaning of recitation — Rule-of-thumb method inadequate.
2. The aim of the recitation: Necessity for a clear aim — The teacher's problem — Recitation tests — Recitation products — Testing as an aim — Teaching as an aim — Listening or observing as an aim — Drill as an aim — When to use these aims.
3. The plan of the recitation: The place and importance of interest — The proper use of the textbook — Textbook use and teacher efficiency — The topical plan of recitation — The lecture plan of recitation — The question and answer plan of recitation — Two types of questions — Forms of questions — The real test of good questioning.
4. Organizing for recitation work: Homogeneity in group desirable — Difficulties in the way of proper classification — Arranging the groups — Real flexibility needed.
5. Right conditions of work.
6. Summary — Questions — Problems — References.

1. Nature and purpose of the recitation

Conducting recitation the real test of teaching skill. The management of the recitation is after all the final test of professional skill in teaching. Here the teacher is confronted with the problem of individual differences as at no other point in her work, and that, too, in a continually widening variety of lessons and exercises.

The time was, only a few decades ago, when the term recitation had reference to the pupil's saying over to his teacher what he had previously learned by himself. The exercise was narrowly intellectual, since preparation for it involved little more than verbal memory work. Such a meaning grew less and less applicable as the aim of the school broadened to include the æsthetic, the physical, the social and moral, and the economic elements, and the curriculum to include nature study, hygiene, civics, organized play, domestic science, drawing, music, and manual work. It is not that the process has become less intellectual than before, but that it has become more physical, social, and

æsthetic. Under the old régime the child sat in his seat with a book only. To-day he has not *a* book but *many* books, and is as often engaged in doing as in saying things. Consequently the recitation is no longer a mere re-citing, or saying over, but includes all the wide variety of mental and bodily activities essential to the accomplishment of this newer aim of education.

The broader meaning of recitation. Under these new conditions the nature of the learning, and consequently of the teaching, process has broadened so that "recitation" means widely different things under different circumstances. So wide are these differences, in fact, that we have come to think of "recitation" as "recitation period" and to differentiate these periods by referring to one as the geography recitation and to another as the domestic-science recitation and so forth. This is merely the way in which we have recognized the fact that the learning process, and consequently the teaching process, is widely different in different cases.

From the child's standpoint, that is from the standpoint of learning, the modern recitation differs in the fact that in one case the child merely sits or stands, and relates what he has previously studied, as in spelling; in another he moves about, working with his hands and using tools and materials instead of books and words, as in manual training and domestic science; in another he uses his whole body, along with words and materials, to impersonate some character, as in dramatizing; in another he exercises his imagination, as by drawing or painting; in another he attempts to perfect some mental or physical process, as in memorizing verses or in developing skill in writing; in another he is moving about in response to social stimuli, interpreting the acts of his fellows and responding to them in coöperation or in competition, as in organized play; and so on, in almost endless

variety, we find the mental, social, and bodily activities combined in different recitations.

From the standpoint of managing the recitation, these periods vary greatly, because the teacher must control the attention and direct the energy and activities of her pupils under these widely different circumstances and to these widely different ends.

Rule-of-thumb method inadequate. With such a variety of processes it is clear that there can be no simple rule-of-thumb method for their proper management. The broad general purpose of all recitations is to direct this learning process to the end that the greatest economy in time and energy shall be effected. How to organize the many different kinds of subject-matter and to plan the varied exercises so that they may be most quickly mastered by the pupils; how to organize the class and to arrange the different materials to this same end; and how to keep each individual working with purpose and enthusiasm is the teacher's task.

2. The aim of the recitation

Necessity for a clear aim. A recitation cannot be successfully managed except with respect to some definite end which is clear to both teacher and pupil. It is one thing for the teacher to say, "The aim of this geography lesson is to impart knowledge"; it is a different thing for her to say specifically what knowledge, how it is related to knowledge the child now possesses, and what she expects the child to do with it now, and five or ten years from now. For purposes of instruction the teacher has not a clear aim for such recitations until she has considered the nature and organization of the facts and exercises involved, and considered them from these points of view.

The child will seldom have so broad a perspective for what he is to study. He cannot see that what he is now

learning will be indispensable to him in later years. Yet this does not mean that he is not to have an aim with respect to every part of his school work. It only means that to him the aim must be *very concrete*. The geography lesson will answer for him some question which, in the previous assignment, the teacher was careful to provoke. What causes the seasons; how St. Louis came to be a large city; or why Chicago is a great railroad center. Or, in physiology, Why should we keep our teeth clean? In such lessons his aim is to try to answer these questions. In writing his aim is to imitate a copy or to increase his speed. In language it is to tell a story or to write a description of a familiar scene. Thus while all lessons will have these general and future values which the teacher will hold in mind, for the pupil they must stand as concrete tasks or problems, so specific in nature that he sees just where to begin, and so related to what he knows and wants to know that he will be moved to action. That is, before the recitation can have a clear aim for the pupil, he must have had an aim in its preparation.

The teacher's problem. The teacher's problem is the double one, therefore, first of determining what she desires to accomplish in the recitation, and second of seeing to it that the pupils have a clear notion of what they are to do. In the schematic presentation given on page 245 the intention is not to set forth any final analysis of this problem, but merely to offer a plan by which, it is believed, the reader may be helped to differentiate the aim of the teacher from that of the pupil in the conduct of the recitation, and to see the points at which the teaching aim must issue in something accomplished by the pupil.

Recitation tests. First of all we need to think of the aim of the recitation from two standpoints: first, that of the process through which teacher and pupils are to pass; and second, that of the product which is to result from the

RECITATION AIM

From the standpoint of

- I The process involved
  - 1. Instruction (by the teacher)
    - a. Testing
    - b. Teaching
    - c. Listening or observing
    - d. Drilling
  - 2. Learning (by the pupil)
    - a. Answering
    - b. Studying
    - c. Reciting
    - d. Practicing or performing
- II The knowledge or experience to be acquired (by the child)
  - 1. Appreciation
    - a. Intellectual
    - b. Emotional
  - 2. Knowledge
    - a. Knowledge what
    - b. Knowledge how
  - 3. Skill
    - a. Mental
    - b. Physical
  - 4. Physical training
    - a. Corrective
    - b. Developmental
  - 5. Moral growth
    - a. Habits of conduct
    - b. Ideals of conduct
  - 6. Executive power
  - 7. Initiative
    - a. Intellectual
    - b. Social

procedure. A teacher may, by her clever ways with children, conduct a lively recitation and yet fail to accomplish a proper end. Recitations are not successful when they end in mere excitement or entertainment alone.

This recitation process we must learn to watch from the standpoint of both teacher (instruction) and pupil (learning). While the teacher's aims may be roughly classified as testing, teaching, listening or observing, and drilling, we must remember that a measure of their effectiveness is not how much the teacher talks or questions or observes, but how much she finds out from the child and helps him to accomplish. To him it is not a mere matter of observing what the teacher has to offer. He is active, not passive, and is to be busy with answering, studying, reciting, performing, or practicing. Her concern is quite as much with the learning as with the teaching end. The nature of the child's answers, how he studies, recites, or practices — these are the points at which her own aims and processes must have their final issue. The rather trite statement that there is no teaching except when there is learning is not less true because it is commonplace.

Recitation products. The product to be obtained, that is, the knowledge or experience to be acquired by the pupil, must be understood by both teacher and pupil. The spelling recitation aims at correct pronunciation, use, and spelling of a given number of new words, with review of certain words previously learned; the writing lesson aims at observable improvement in position, movement, form of words, and speed; the arithmetic recitation at a full and clear explanation of certain assigned problems, or drill on certain number combinations; and the reading recitation at correct pronunciation, clear enunciation, accurate expression and interpretation of a given piece of reading matter. Beyond these immediate products, however, the teacher

aims at a list of broader, more general, more distant achievements, all of which are matters of slow growth. While correct spelling, reading, and writing may be her immediate aim, it is through these that she seeks the development of her pupils in the knowledge, skill, and appreciation of their mother tongue. Nor is it knowledge of language only, but knowledge of history, number, institutions, and people past and present, and of essential processes, that the teacher must keep in mind.

How to bring the narrow and concrete purposes of each individual recitation to bear upon the accomplishment of these ultimate aims of appreciation, knowledge, skill, physical development, moral growth, executive power, and individual initiative is the real problem involved in the formulation of the recitation aim, and it is in the task of fitting the immediate and concrete teaching act into the ultimate purpose of the work that the teacher comes to realize fully that her aim in teaching can never be separated from the methods by means of which she may hope to attain it.[1]

Testing as an aim. In testing a class it is easy to work on the assumption that the main responsibility lies with the pupils. Such an attitude breaks down the proper relationship between teacher and pupils, by placing the class on the defensive. This need not happen if the teacher has previously determined upon just what she will test for, and upon a plan of procedure. It is not the teacher alone, but the child also who must discover errors and deficiencies in the work done. It is a coöperative undertaking, therefore, in which all join in a complete stock-taking, preparatory to the next move forward.

The old-fashioned teacher tested more often than she taught, and that mainly for facts. Could the child spell the word, diagram the sentence, trace the military cam-

[1] See Chapter II, sections 2 and 3.

paign — yes or no? She tested for what the child remembered, and not for how he had learned it or what he could do with it. In the modern classroom the function of the test has become much broader. Its aim is to get behind the mere lack of information to its causes. Hence it tries to answer such questions as: What does the pupil know? What of the assignment does he not know? Why did he learn facts *x* and not facts *y*? Did he fully understand the assignment? (If not was it my fault?) Just how did he study his lesson? Did he try to memorize when he should have tried merely to get the essential meaning and facts? Did he go to the right sources for materials, or did he use effectively those at hand? Was his failure merely lack of application or lack of interest, and if so, why? These and similar detailed inquiries will find out just what the child does and does not know, what he can and cannot do, and the reason in every case.

The teacher who can maintain the hearty coöperation of her class through such an inquiry has accomplished much in the art of teaching. That accomplishment, however, is possible for all teachers who will work to convert the vague aim of "testing" into such concrete and specific aims as are here suggested.

Teaching as an aim. In testing, the teacher is trying to find out things for herself, things which she may use not only as a basis for judging the pupil's efficiency, but mainly as a basis for her own positive contribution to the recitation through her instruction. The teaching process is so extremely varied in its nature, owing to the ends it must meet, that in this brief space little more than a mere enumeration of these ends can be undertaken. First, teaching begins at the point where help is needed, and proceeds in the general direction of the ends set forth under section II, in our outline above. But these ends, while they are fun-

damental, are distant, can only be attained in noticeable degree after many recitations, and cannot be substituted for the specific end to be attained in a given exercise. More immediate ends are:

1. *Self-expression*, which must cover more than what is found in books or teacher's directions, more than oral or written speech, more than mere fact. There must be room for the imagination in writing, drawing, story-telling, handwork, and dramatization, wherein voice, words, gestures, bodily movement, facial expression, and even costuming are all brought into play to convey to listeners the feelings and thoughts of the pupil reciting. Such self-expression leads to moral, social, and executive growth.

2. *Coöperation and competition* as social and economic principles may be thoroughly established in the minds and habits of children if group work is turned definitely to such account. The principle of division of labor may be effectively experienced where reports on individual assignments all contribute to the development of a central idea, or where individual pupils each perform a separate part in making something in the shop or laboratory. Similarly the spirit of fair play in competition can be taught where groups are pitted against one another in the performance of some task.

3. *The development of right habits of work* is another specific point of attack for the teaching process. Very few children will discover for themselves that chapter headings, with their formal subdivisions, are the key to the chief points in the lesson. There is a best procedure in all kinds of study from bare memorizing of spelling to writing a story, solving a problem in percentage, designing a hat, or painting a picture. As has been pointed out,[1] this best way will rarely be hit upon by the child if he is left to his own

[1] See Chapter XIII.

resources. It is an ever-present problem which must be cared for in that part of the recitation which is devoted to the assignment of the lesson.

Listening or observing as an aim. In some recitations the teacher's chief function will be that of auditor and spectator. It is often a great temptation to do the talking, or to add a touch to a drawing when one sees so clearly what is needed; and there are times when such help should be given. On the other hand there are times when such help will destroy the child's confidence in himself and put an end to a type of self-expression that is highly important. When a child is telling a story, discussing a topic in history, describing a specimen, or arguing a point, he should be heard to the end. If he is writing, drawing, dramatizing, or performing an experiment, then too much interference by the teacher will destroy his initiative, and the final product, though it may be better for the teacher's help, will not be the pupil's work, nor will he feel the satisfaction of having originated or completed the task. When a pupil has done well in a recitation, a quick acknowledgment of the fact by the teacher will usually be more effective at the time than too many suggestions as to how it could have been better. There is a proper place for constructive criticism of a child's work, but so there is for quiet sanction of it.

Drill as an aim. Some recitations will be devoted solely to practice or drill on some mental or physical process, such as learning number combinations, verses, location of important geographical features, writing, drawing, singing, dancing, sewing, and carving. Here the end to be achieved is mental or physical skill, and the process is that of developing a specific habit. The aim will be slightly different for every habit, but in all cases concentrated attention, with frequent repetition which stops short of serious fatigue, will be necessary, and a completely mechanized procedure

must finally result, else the practice will have been largely wasted.

When to use these aims. It is not possible to say just when and where each of these aims and processes will come into play. In almost every recitation there will be testing, teaching, listening, and drilling. There will often be rapid and frequent movement from one of these processes to another, and back again. Similarly the pupils will be answering, reciting, and practicing, and no one can direct the teacher as to just when she may expect one or another of these responses. The fact is, however, that these are all distinct and separate functions, and the teacher should study them diligently as such. The result of proper care in their use by the young teacher will be teaching habits which will place upon the class a reasonable portion of the responsibility for the success of the recitation, prevent an undue amount of bare testing at the expense of teaching, make the teacher an intelligent auditor, give the pupils a chance to tell what they feel and know, insist upon a due amount of intelligent practice or drill, and teach them how to study.

Again, there is no way of saying when appreciation, knowledge, or skill, will be the aim sought. Certainly many of these aims will play a part in almost every recitation. To know just what each one means, and how it may be attained, will undoubtedly rationalize the teaching process. There is much too little conscious effort in the direction of training for intellectual and emotional appreciation; knowledge is too often knowledge of *what*, and too seldom knowledge of *how* or *why*, skill is too rarely of the physical type, and too narrowly intellectual; physical exercises aim too indefinitely at either development or correction; moral growth is too often either ignored, or expected as a result of moralizing, whereas its problem is that of developing specific habits and ideals of right conduct; executive training, training for

leadership, is grossly neglected; and intellectual and social initiative are more often suppressed than stimulated.

These aims may often overlap each other, but they represent definite aspects of personality, definite points of contact with the world, definite sources of power over ourselves and our fellows, definite angles from which we are judged by society, definite lines along which we do or do not contribute to human happiness. They must therefore stand in the teacher's mind as the ultimate criteria of the effectiveness of her work, and each recitation should be held to one or more of these accounts, while no one of these aims should be overlooked or long neglected.

3. The plan of the recitation

Every recitation has two distinct parts: the handling of the lesson that has been prepared for the occasion, and the assignment of a new lesson. The function of the assignment is mainly that of teaching how to study the next group of materials, and has therefore been treated in the chapter on The Class Studying. Consequently only a few words as to its place in the recitation plan are needed here. The assignment will be long or brief, general or detailed, according to the nature of the task it has to present. Whether it shall come at the beginning or end of the recitation period is a question which can scarcely be settled by a general rule. There are times when the assignment can properly come at the beginning of the period, as when it has no intimate connection with the lesson in hand. Under ordinary circumstances spelling lessons, drill on number combinations, and theme writing, would constitute such cases. Usually, however, the end of the period is the better place for the assignment, for the reason that the lesson just recited naturally leads up to and presents problems which the assignment should explain.

The plans for conducting the recitation part of the period will vary with the type of lesson to be dealt with,[1] but there are a number of problems which present themselves with sufficient frequency to warrant their brief consideration here. Such are the place and importance of interest, a proper use of the textbook, the question and answer method, the place of the lecture, and the topical method.

The place and importance of interest. This subject has been dealt with elsewhere; it is only necessary to apply here what has already been said in another connection on page 100 ff.

Common abuses of the textbook. The very excellent textbooks which we have in such abundance have been invaluable in systematizing the work of instruction. They have made for definiteness in assignment and relieved the teacher of the endless task of collecting and organizing material for her classes. On the other hand, they have at the same time been a source of evil. The lazy, indifferent, or ignorant teacher has learned to rely solely upon the text as the source of materials for her class, and has therefore grossly neglected the important duty of supplementing the one small book which was designed as a mere outline. The consequence has been much memoriter work on the part of the pupils, along with which has developed the assumption that the facts of the text are all there are on the subject Such abuses of the text have stunted the child's initiative in seeking sources outside the book and in applying the knowledge and skill of the schoolroom to problems of life outside. These are not imaginary, but rather very real, dangers for every teacher who does not hold herself strictly to account in these respects.

[1] For a fuller consideration of types of lessons see Strayer, G. D., *A Brief Course in the Teaching Process*, pp. 41–106; McMurry, F., *The Method of the Recitation;* Earhart, L. B., *Types of Teaching.*

Textbook use and teacher efficiency. There are proper uses of the text, however, which can be learned, and which, when applied, make the text an indispensable tool. First, the teacher should remember that she is teaching her class, and that she is teaching a subject, not a book; that the text presents some essential facts, and suggests a plan of organization for others which, together with the class, she may gather from other sources. Second, the text material offers a convenient means of assigning a definite formal task for which all pupils should be held responsible. Third, the material of the text is likely to present most of the real difficulties with which the class will have to cope in their study of the subject, such as new words or difficult points in an explanation. Finally, one chief function of the textbook is to bring out clearly the plan of organization of the matter presented. A mastery of this technique is important, since in ordinary books, journals, and newspapers such helps are much rarer.

The topical plan of recitation. To be able to stand before an audience and think logically while speaking is all too rare an accomplishment, and one by which the world sets much store. There is no school exercise so well calculated to develop this ability as the topical recitation. As a method it is applicable from the very beginning to the end of school work, scarcely more in proportion at one age than at another. The six-year-old will speak more briefly and on a different topic, but with the same problem of clear, logical, forceful presentation before him as has the college student in his advanced discussions.

The teacher's task in the two cases differs more in degree, therefore, than in kind. In both cases she will see to it that the child speaks in his own language rather than in that of the book; that he tells what he thinks or knows rather than what some author thinks (except of course when reporting

what he has read); that he sticks to his subject; that every point made bears proper relationship to the line of thought; that his language is clear and grammatically correct; that he does not consume more than a reasonable amount of time; that he makes it a point to interest those listening; that he speaks to his class, and not to the teacher alone or to the floor; that he stands or sits erect and speaks in good voice; and that he stops when he is through.

To accomplish these many ends she will not lavish too much or too little praise on a good recitation, and negative criticism or sharp rebuke will be similarly administered. She will rarely stop a pupil except at a natural pause, and will often tide him over by putting a question or by permitting another pupil to carry forward the discussion. At the close, however, all types of errors in language, or in fact, or in length or brevity of speech, may be brought to light by questions, to the end that the child may fully judge the success of his presentation.

The lecture plan of recitation. In the elementary school there can be little if any formal lecturing, but there is room for much simple telling, which will usually occupy a subordinate place during the recitation period. Almost every lesson needs to be supplemented by the teacher, who keeps an ever-changing and growing stock of stories, anecdotes, and facts which she introduces as additional material in the recitation. The purpose of such kind of lecturing is varied. At one point it will add definitely to the number of facts brought out by the class, at another it will illustrate a point with some familiar incident, at another it will explain and demonstrate the working of a principle, at another it will deliberately provoke laughter with some pertinent anecdote or story which aims partly to drive home a point and partly to cause a real relaxation.

The question-and-answer plan of recitation. In almost

every kind of recitation the question and answer will play a large part.[1] Even where a topic has been recited upon, questions will usually follow to clear up certain points, or to supplement what has been said, and where the discussion has been mainly by the teacher the problem cannot wisely be left until by questions she has assured herself that what she has been saying has been fully comprehended and critically evaluated by the class.

Two types of questions. There are two general types of questions, one of which is designed to test memory for facts obtained from books or observation, the other to test the child's power to interpret and use facts. Both are essential in practice. The one, however, is easy to formulate, is likely to lead to an overemphasis of book learning, to encourage mere guessing, and to discourage originality. The other is more difficult to formulate, but it stimulates thought and leads to a testing out of facts remembered by applying them in practical situations. The former is too frequently overworked in the classroom, because it is an easy way to get a lively response from the class. We should not have fewer fact questions perhaps, but we should have more of the kind that put the pupil on his own initiative, where he must exercise judgment as well as memory.

Forms of questions. The form of the question is of fundamental importance. The *direct* question, to be answered by yes or no, such as: "Is hail made of frozen raindrops?" is poor because it stimulates guessing at the answer. By the law of chance a child will answer correctly fifty out of every one hundred such questions without knowing a solitary fact involved. By a correct guess the pupil often deceives himself into thinking that he really knew the answer. The

[1] For a careful description and critical study of questioning, see Stevens, Romiett, *The Question as a Measure of Efficiency in Instruction*, Teachers College Contributions, no. 48 (1912).

alternative question, such as, "Was Jefferson a strict or a loose constructionist?" has all the evils of the direct question, with no added virtues, and neither is improved upon by the *leading* question so often denied an answer in court. It is worse than a waste of time to ask "Is the magnetic north pole a little different from the most northern point on the earth?" for what child would be so stupid as to guess "No" in answer?

The real test of good questioning. Questions formulated in these ways do not require the child to think or to reorganize his previous experience in any way, and yet these are the real tests of the value of questions in the recitation. There are two aspects of the problem to be studied, the question and the answer. There are certain principles which the teacher will do well to follow: First, the question must have scope enough to provoke thought, to do which, it must (*a*) be clear and concise; (*b*) challenge the attention of all members of the class; (*c*) be properly related to previous and succeeding questions, and (*d*) be not too long or too complicated. Furthermore, the question should be asked in an ordinary conversational tone, it should not be repeated, and it should be fully stated before being addressed to any particular pupil. Pupils should be questioned in no regular order; and care will be necessary to prevent most questions, being answered by those who habitually make good replies.

What to do with answers is little less a problem than how to provoke them. Certainly the teacher must be an attentive listener, taking care not to assist the speaker too much by a look or gesture which seems to say Yes, go on, or No, it is the other way. A few common errors are: (*a*) repeating the child's answer after him; (*b*) jumping at his conclusion without permitting him to finish speaking; (*c*) adding to his answer to avoid formulating a question that

will bring out the information from the class; and (*d*) permitting him to answer a different question from the one asked.

4. Organizing for recitation work

Homogeneity in group desirable. In our discussion of grading and classification (Chapter X), it was suggested that grade groups are not necessarily good recitation or work groups. It was also suggested that it is not always necessary to observe grade lines in organizing class groups and, further, that it is not always necessary to classify pupils in the same way for all subjects. Not infrequently our standard tests show a spread in ability of pupils in a given grade of as high as five or even seven grades. That is, some of the children of grade five are able to read only as well as third-grade pupils while others read as well as eighth-grade pupils. Even in a single fifth-grade class this wide difference is very common.[1]

One essential in group work is homogeneity in those traits that count in the work. Variation of pupils in height, color of hair or eyes, or weight, affects the success of a recitation very little. Variation in general intelligence, in experience, in general knowledge, and especially in knowledge of the subject in question, counts for much. A class may be quite heterogeneous in the former but not in the latter group of traits.

It is often argued that slow pupils learn much from bright ones, and that classification on the basis of ability is really undemocratic, and therefore wrong. The answer to this is: Grant that the dull pupils learn from the bright ones, why not employ teachers rather than pupils to do the teaching? Also, do the dull ones learn independence of thought and action, or do they learn to wait for others to lead? And

[1] For abundance of data see recent School Survey Reports and City School Reports of testing programs.

again, why not give the bright ones a fair chance, too? It is certainly democratic to give equal (not necessarily like) opportunity to all, and that is what ability homogeneity grouping will do.

Difficulties in the way of proper classification. It is not a question of what we should do; that is very obvious. It is rather a question of what we can do to provide homogeneous groups. Our room groups are usually determined in part by the number of pupils available and in part by grade lines. Where the number of pupils is small, any one class will include pupils of more than one grade. Where the school is very large the room will probably contain pupils of but one grade or half grade.

It is reasonable to assume that the pupils of any one grade are somewhat homogeneous, in that they have been similarly exposed to like materials of instruction. Making up homogeneous classes from the single grade group should be easier for this reason. In reality, however, most of the classrooms of the country contain from two to eight grade groups. We have the opportunity — we may say the necessity — therefore, of breaking over grade lines in arranging our classes. In a room with forty pupils the teacher is free to classify as she pleases so long as no other room is involved, so long as her recreation periods do not conflict with the general school program, and so long as work done in her room by special teachers or supervisors does not too greatly upset the schedules of such outside helpers.

Arranging the groups. If our forty pupils belong to a single grade, say grade IV A, then it will be found that in each study there is wide variability among the children. Some are very bright and far ahead, while others are very slow and well behind. Instead of teaching the forty pupils as a single class the teacher should break them up, in some cases into two, and in other cases into as many as

three, separate work groups. Calling these groups low, medium, and high,[1] we may expect to find a given pupil in the low group in one study and in the medium or high group in another. Thus we shall have a different classification for each study. This may involve some little difficulty in a crowded room in seating the recitation group together, though the difficulty is not insurmountable.

If our group of forty is a one-teacher, eight-grade school, then we have a different situation. We have at best no time for additional refinements in classification. There are too many classes at best. Our problem, then, is to provide the greatest homogeneity possible in our recitation or work groups and at the same time keep the number of classes reduced as low as possible.

Under such circumstances, with forty pupils scattered through eight grades — that is, with an average of five pupils per grade — we may introduce the principles of alternation, combination, and correlation and reduce the number of groups (see Chapter XII). Then, for recitation groups we may in many instances, for the sake of homogeneity, break over these lines. The dullest pupils in grade V might profit by working with the brightest pupils in grade III in reading or arithmetic, while the brightest pupils in grade III would profit by being freed from the retarding influence of the slower pupils of their own grade.

Real flexibility needed. The point emphasized here is that we can have good classification if we will take the problem of classifying seriously. Our purpose is to have homogeneity and a reasonable economy in the number of classes. This can be accomplished whether we have one or many grade groups in the room, but because of individual differences, and because pupils move at different rates in their

[1] They need not be so designated in the room if being called low is likely to discourage the children.

studies, we cannot assume that a right classification at the beginning of a term will continue to be right through the months following. Almost surely it will not. So our class lines must not be rigid. It should be very easy to shift from low to medium or *vice versa* as conditions warrant. In one topic in arithmetic John may be in the high group. In the next topic he may do better in one of the other groups.

Accordingly, as we have insisted elsewhere, grade lines must be flexible and easily crossed; and here we must insist upon applying this idea even more freely in the matter of classification.

5. Right conditions for work

What has been said on this subject in connection with the chapter on The Class Studying applies almost verbatim here. The teacher needs all her energy for her class, and should suffer as few distractions as possible. Regularity, punctuality, strict adherence to assignments, physical conveniences, all materials at hand, careful preparation for the recitation on the part of both teacher and pupils, all need to be watched; and then as cheerful and as wholesome an atmosphere of earnest, rapid work as is possible should be the teacher's aim.

6. Chapter summary

In this chapter we have discussed the nature and purpose of the recitation, distinguished between the teacher's and the pupils' aims, clarified these aims by the use of illustrations, and showed when and where they should be used. We have also suggested various general plans for conducting the recitation, and the conditions under which such work should be carried on.

In doing this we have seen that managing the recitation is above all the real test of teaching skill. The first essential for the teacher is to know specifically what it is she expects to accomplish, and to see that the pupil knows what he is to do and how to do it. She must learn to distinguish the teaching from the testing, drilling,

and observing processes, and know when and where each will best apply. She must keep in mind that the chief thing to watch is the character of the child's responses and his ability in applying the facts or skills that he gains from study.

In formulating plans for the recitation, the importance of interest, that is, real motive, must not be overlooked. The textbook serves as a guide, and not as the only source of facts. The use of the topical plan of recitation, the use of question and answer, and the use of lecture or telling methods are all most serviceable where properly managed, though each is capable of abuse. Finally, no plan is successful in the midst of unnecessary distractions.

QUESTIONS FOR DISCUSSION

1. Explain the changes that have taken place in the meaning of the term recitation.
2. Why is recitation period a better term for present use?
3. There are obvious differences between a spelling recitation and a recitation in domestic science. From the standpoint of managing the recitation just what are these differences?
4. If you were giving an explanation of the aim of education, how would it differ from your statement of the aim of the recitation? If the two aims are different, why are they so?
5. What difference is there, if any, between the aim the teacher will have for a recitation and that which the pupil will have? Why?
6. How far does a full statement of one's teaching aim necessitate a clear understanding of the method to be used in carrying out that aim?
7. Under what circumstances in a recitation would it be proper for the teacher to: test? teach? listen? observe? drill?
8. Explain fully how testing is essential in most recitations, and just what function such testing should serve.
9. How does teaching differ from testing in its purpose? In its plan of action?
10. What does it mean for the teacher to be a good auditor?
11. Just what may be included in the teaching aim "self-expression"?
12. Explain the possible uses and abuses of the textbook, the lecture, topical, and question-and-answer plans of conducting the recitation.

PROBLEMS FOR STUDY

1. By means of tests and of information gathered by visits to classrooms, answer the following questions for five recitation groups:

a. To what extent do the pupils vary in ability in reading?
b. To what extent do they vary in age?
c. To what extent do they vary in rate of progress to date?
d. To what extent do they vary in I Q, and E Q?
e. Write a prescription for the reclassification of this group for reading work.

2. Make a study, by the use of tests and other means, including mental age, of a selected group of ten pupils. Select the pupils from different grades and with reference to general mental ability. Make the selection so that there will be a variation in I Q from well below to well above normal:
   a. Find the pupil's rank in his class in each of his studies, as shown by standard tests.
   b. Obtain the rank as based upon the teacher's judgment.
   c. To what extent do test results and teacher's judgment agree?
   d. Are these children properly classified? Answer for each child separately.
   e. Does I Q seem significant as an index to proper classification?
   f. Does mental age seem significant?

3. Make a study of teachers' judgments as to the relative amount of homogeneity desirable for good teaching groups, in each of the following studies: oral reading, geography, civics, spelling, composition, arithmetic, manual training, domestic science, hygiene, history, and writing, say for upper-grade work.

Question form to be submitted to teacher:

Name ..... Years' training above high school ..... Years' experience in teaching .....

1. On the basis of *x* oral reading test[1] what, in your judgment, is the widest range in ability that should be allowed in an upper-grade class in reading? You are to state here what you think you yourself could handle successfully; that is, pupils of abilities ranging from what to what in this test. From ..... to .....

2. With this amount of variation or heterogeneity as the limit in oral-reading classes, and assuming that you had similar tests with similar scales or scores for each of the other subjects, please set down here the range for the other subjects, as follows:

Geography:	from ..... to	Civics:	from ..... to .....
Spelling:	from ..... to	Composition:	from ..... to .....
Arithmetic:	from ..... to	Manual Tr.:	from ..... to .....
Dom. Sci.:	from ..... to	Hygiene:	from ..... to .....
History:	from ..... to	Writing:	from ..... to .....

3. From these judgments what inferences can you draw as to the problem of classifying pupils for work or recitation purposes?

---

[1] For this a given test with which teachers are familiar should be chosen. If the scores possible to attain in the test range from zero to 20 or 50 or 100, the test might be a little easier to use as a basis for judging other subjects.

REFERENCES FOR ADDITIONAL READING

Bagley, W. C. *The Educative Process*, chap. XVII. New York, The Macmillan Co., 1905.

Betts, G. H. *The Recitation.* Boston, Houghton Mifflin Co., 1911.

Dewey, John and Evelyn. *The Schools of Tomorrow*, chap. VI. New York, E. P. Dutton Co., 1915.

Douglass, Harl R. *Modern Methods in High School Teaching*, chaps. II, VI, VIII, IX. Boston, Houghton Mifflin Co., 1926.

Freeland, Geo. F. *Modern Elementary School Practice.* New York, The Macmillan Co., 1920.

Horne, H. H. *Story Telling, Questioning, and Studying*, chap. II. New York, The Macmillan Co., 1916.

Minor, Ruby. *Principles of Teaching Practically Applied*, chap. II. Boston, Houghton Mifflin Co., 1925.

Parker, Samuel Chester. *General Methods of Teaching in Elementary Schools*, chaps. III, X, XI, XII. Boston, Ginn & Co., 1922.

Robbins, Chas. L. *The Socialized Recitation.* Allyn & Bacon, 1920.

Stark, W. E. *Every Teacher's Problem*, chap. VII. New York, American Book Co., 1922.

Strayer, G. D., and Engelhardt, N. L. *The Classroom Teacher*, chap. V. New York, American Book Co., 1920.

Strayer, Geo. D. *A Brief Course in the Teaching Process*, chaps. IV to XII inclusive. New York, The Macmillan Co., 1911.

Wilson, H. B., Kyte, Geo. C., and Lull, Herbert G. *Modern Methods in Teaching*, chaps. V, VI, IX, X, XI, XIV, XVII. New York, Silver, Burdett & Co., 1924.

CHAPTER XV

TESTING THE EFFECTIVENESS OF THE MACHINERY AND THE PROCESS

Outline of Chapter

1. The need for definite knowledge as to results: Previous chapters recapitulated — Education a process of change — Tendency in education away from generalities — The movement has been slow.
2. The things to be measured: Membership in the group — Attendance and discipline — Interest in work — School machinery — A quantitative viewpoint essential.
3. The means for measuring these results: Records and reports — The examination as a means of measurement — Criteria as to examinations — Defects in examination tests — Variability in marking illustrated — The new type of written examination — The advantages of such examinations.
4. The use of standardized scales and tests: Our need for accurate measures — The teacher's need for accurate measures — Possible abuses of tests — Some things we have learned from the use of tests.
5. Other means of measuring results — Qualities which are hard to measure — Desirable schoolroom standards.
6. Summary of Part III — Questions — Problems — References.

1. The need for definite knowledge as to results

Previous chapters recapitulated. Thus far we have attempted to set forth, in Part I, the nature of the management problem by a discussion of the meaning and aims of education, how the aim functions in practical management, and the nature of the different factors with which management has to deal. In Part II these facts and principles were brought to bear upon a consideration of the child as the central object of management, how he is to be brought into contact with school conditions, and the problems of attendance, order and discipline, punishments, and incentives for study. In Part III the machinery and processes by which these aims and ideals are to be wrought into concrete changes in child life, e.g., how the school is to be organized, the special problems of grading and promotion, the making and use of curricula and daily time schedules, and how to direct the study and recitation processes, have been treated at

some length. It remains for us to consider here the question of how we are to know definitely that our machinery and processes are turning out actual results.

Education a process of change. We have been thinking so far, to a large extent, in terms of certain biological, psychological, sociological, and economic facts and principles, and have attempted to lay down fairly definite rules of action. Undoubtedly these are the basic sciences upon which education must build, but they are not the only sciences needed. Certainly we are working with phenomena of these types, but we are also working with other phenomena which are more properly classified as educational. Medicine deals with chemical, physiological, anatomical, and hygienic phenomena, but when a physician is trying to do a certain thing with these phenomena known as doctoring, we refer to the facts about this practice as medical phenomena. So in education, however much we may know of individual nature, and of the social and economic claims upon it, we have still to reckon with the phenomena created by the attempt of the teacher to direct the growth of the child and to prepare him to meet these claims. When we have taught a child we have produced a change in him. What is the nature and extent of the change?

Tendency in education away from generalities. For centuries the world has recognized educational phenomena, and has built up splendid philosophies of education, but only recently has there been any attempt to speak of the products of school training in any save the most general terms. We say we are training the child with respect to memory, reason, morals; that this pupil is doing well, that one better; and that this one shows refinement, culture, or polish. Only recently, though, have we frankly faced the question — What is the nature and extent of these various products which we call education?

This new attitude has been brought about by the increasing complexities which have been forced upon the school as a result of the vast economic and social changes of the past few decades. The cost and the importance of education have become too great to be any longer entrusted to haphazard methods, and as a consequence the school has been compelled to learn how to take stock of its achievements, and as far as possible to do so in quantitative terms.

The movement has been slow. The teaching profession was extremely slow to appreciate and to respond to this need. Scientific method made headway in every phase of commerce, industry, and farming before it was applied to education. But as the new studies and new activities and aims began to find place in the school, the problem of evaluating each new item was forced upon us, so that no choice was left but to try to say what each was worth. It was in the midst of these conditions that a new type of educational leadership was developed, which set for itself the task of applying scientific method to the measurement of educational processes and products.

2. The things to be measured

Membership in the group. We say that education means physical, social, and moral efficiency, and that to educate means to produce changes in the individual to these ends. If this is to be accomplished the child must first of all become a member of the school group. How shall we know when this has been accomplished? The fact that John causes us no trouble, that he is quiet and studious, that he plays with the other children, does not tell us. Let us ask rather: Is he polite, gentle, and generous in his relationship to others? and then answer by citing specific instances of his politeness, gentility, and generosity, or cases where he failed

in these respects. Does he coöperate readily and effectively in group work and group play? If so, not only does he know how to keep his place in line, to be a good member of a team at play, to fill his place in the dramatized recitation, to keep his part of the room neat and orderly, to help collect and distribute materials, but he does these things promptly and accurately. Is he learning to lead as well as to follow the group? If so he suggests games to be played, gets himself chosen as a leader, occasionally brings public opinion of the group to bear upon an unruly member, and gives directions, not orders. It is the answer to these and a thousand other specific questions that definitely defines a child's membership in his group.

Attendance and discipline. We say the child must attend school regularly. What percentage of the full time does that mean, not only on the average for the entire class, but for each pupil as well? What is the influence of a given degree of irregularity in attendance upon work in arithmetic or history? Are the retarded children regular or irregular in attendance?

Maintaining good order and punishing offenders have always been regarded as essential. Does the "pin-fall" type of order produce real freedom for work, or is it repressive? Cite cases to illustrate. For each case of disorder, try to state whether it was due to lack of knowledge, forgetfulness, mischief, or malice. What effect has the case on the offender and on the class? Exactly how should it be dealt with?

Interest in work. We say the work of the school should be interesting, but how often do we try to find out exactly why a child is more interested in one subject than in another? We often say that this is a more interesting subject than that. We should try to find out why it is. Why is the multiplication table interesting to one pupil and not to

another? If one pupil can find an incentive for studying grammar, then we should study that child to find out what the incentive is, and try to use it elsewhere.

School machinery. We insist upon reducing certain school practices to routine. Just how much time is consumed in getting the children into and out of the building, in collecting and distributing wraps and supplies, and with what regularity are such standards maintained? To what extent are habits of neatness with regard to desks established, when judged by the number of daily reminders to delinquents?

We spend much time and worry over promotions. Just how accurately is each pupil classified in each of his subjects? Whenever he is much ahead of his class he is losing time, and when he is too much behind he is working under a handicap.

So we could go on almost indefinitely inquiring about the curriculum and the daily program, handling the study and recitation processes, and asking specific questions, answers to which describe or define in concrete, often in quantitative terms, some particular activity which the school aims to perfect. The more one tries to bring the customary general aims of culture, and moral development, down to where they can be thought of in terms of what they do, and of what it takes to produce them — that is, in terms of what is actually going on in the school — the more one is convinced that there are very few educational results or products that cannot be measured rather definitely, for after all culture and moral efficiency are more than vague qualities of soul. They are practical modes of behavior, which rest upon innumerable specific habits and innumerable bits of knowledge, all of which can in most cases be singled out and measured. What children have learned must show somewhere in their behavior. If it does not, then no evidence exists that they have learned it. If a child

has improved in writing he writes better than he did before; if he has improved in attendance, figures will show how much; if he has improved in leadership he will be seen directing others in play, and offering suggestions about how to dramatize the lesson or how to find some new facts about the habits of the frog that is under discussion in nature study. Most of these things that go to make up culture, or physical, social, intellectual, and moral efficiency, are not so very vague when we come to look for them in these forms.

A quantitative viewpoint essential. It must not be assumed that we have suitable instruments, as yet, for measuring the progress of pupils in all these things. This does not mean, however, that we cannot study the results of these types of training in a more or less objective way. While at many points it is not yet possible to state how much product we have, it is possible in almost every particular to find objective evidence that some amount of progress has or has not been made. It is this quantitative viewpoint that we desire to emphasize as indispensable in modern management. Once we arrive at the point where we quit assuming that the effects of teaching are mostly spiritual and intangible, and therefore vague and unmeasurable, and accept the idea that we are trying through instruction to make definite changes in the children, we shall be in a mood to look for some evidence of the change sought. Once we find that change has been effected, we shall have no great trouble in distinguishing between little and much of the thing we find.

This is a first important step toward the development of a measuring instrument. Our first reminder to the teacher is, then: Hold yourself responsible for having an objective view of your work; organize and direct your children to some end; know exactly what that end is to be; make sure you are able to recognize it when it has been achieved; try to dis-

tinguish between much and little achievement; and if possible find a means of measuring the amount accomplished and of speaking in terms of it. This plan, it must be remembered, applies not merely to studies alone, but to the whole of the child's life and activities in school, and to the machinery, methods, and devices used by the teacher.

3. The means for measuring these results

Records and reports. Until recently the supervisor has seldom asked the teacher to report on more than two or three things that are not directly connected with children's studies. He asked for records of attendance, punishments, and progress in studies. The formal examination was used for measuring the last named, while the bare figures from the daily register told of attendance and punishments. Today, however, we wish to measure all the wide variety of processes and results of which those suggested above are but typical. For this purpose the examination is still useful, but, in addition, careful records of many things not reached by ordinary examinations are being kept, and from these records standards and norms are being worked out by means of which the teacher may quickly and effectively determine the progress her pupils are making. To these two means there is to be added — perhaps most effective of all — the standardized tests and scales. To use any one of these effectively the teacher must understand it, know where and when to use it, and the significance of the results obtained.

The examination as a means of measurement. Though susceptible of many abuses, the old type of examination can serve two important functions in teaching. In the first place, it can be made to test results of teaching as they appear in the forms of habits and knowledge. In the second place, it has a rather definite educative value in itself.

As a test of a child's skill or knowledge the examination

is designed to find out what the child does not know about the subject, in order that the question of what next to teach may be dealt with. In this the examination is distinguished from the informal test, given as a part of the ordinary recitation, where the aim is to bring to light and to clear up the temporary difficulties within a certain narrow field. The examination is exhaustive, and its results are a measure quite as fully of the final effectiveness of the teacher's work as of the children's study.

The educative value of such experience lies in the fact that it furnishes a motive (though not the best) for carrying important processes to a higher degree of perfection, and for making a more careful organization of the essential facts. In focusing attention upon these things the child not only learns what it is important he should learn, but receives training in how to get at the essential points in his studies.

Criteria as to examinations. The teacher needs to know how to conduct examinations that will achieve these results. For this there are at least a few criteria which may be universally followed. First of all, one should decide exactly what the examination is to find out, and then formulate the questions to those ends. In most examinations there will be two, and in some, three, types of questions. All examinations will call for facts or information, and for the interpretation or application of those facts, and in some studies there will be questions involving execution. Overemphasis on any one type of examination is entirely possible. The questions should always be clearly stated, and the test should cover the entire field. Examinations should never be held over a class as a threat, nor should their results be used as the sole basis for deciding the classification of children. The examination should not replace the briefer and more frequent test. Finally, it should ordinarily be in writing, and the class should know that it is coming.

Defects in examination tests. There are important difficulties in the way of using examinations, some of which lie in the fact that the questions are too often not formulated according to these criteria.

1. Questions are too often merely factual, and so test the child's memory only, or they ask for too many unimportant details.

2. The examination is often made too long, or too difficult, or too easy. If too long or too difficult it tends to discourage the class, and if too easy it does not really test.

3. The real point at which the examination falls short is in the fact that it furnishes no adequate basis for comparison of results between classes, or from year to year, for the reason that there is no common standard to apply in reading papers. Teachers usually suppose that they can mark a set of papers all on the same basis, but investigation has shown that this is not at all true.[1]

Variability in marking illustrated. For example, Starch and Elliott had a high-school student solve a simple problem in plane geometry and gave his answer to forty-nine competent geometry teachers to grade on the scale of 0 to 12½. Their grades were as follows:

9 gave it 0	6 gave it 6
1 gave it 2	2 gave it 6½
2 gave it 3	4 gave it 7
6 gave it 4	1 gave it 8
2 gave it 4½	2 gave it 9
10 gave it 5	1 gave it 10
2 gave it 5½	1 gave it 12½

The range here — even in the case of an exact problem in

[1] Starch and Elliott, "Reliability of the Grading of High-School Work in English"; in *School Review*, vol. xx, pp. 442–57; "Reliability of Grading Work in Mathematics," *ibid.*, vol. xxi, pp. 254–59; "Reliability of Grading Work in History," *ibid.*, vol. xxi, pp. 676–81.

geometry — is from zero to perfect. It is clearly evident that these forty-nine teachers were looking at very different aspects of that paper. Some looked at the form, some at the spelling, some at carelessness, some at the amount of absolute accuracy, some gave it the advantage of the doubt. An examination of these studies by Starch and Elliott must fully convince us that the results of ordinary examinations cannot serve as an adequate basis for promotion, or for the comparison of one school or class with another. With the growing complexity of our educational problems such comparisons are absolutely essential, otherwise sixth-grade ability in one school cannot mean sixth-grade ability in another. Every one who has seen children enter a school from some other city or district knows of the frequency with which they have to be entirely reclassified, and that because grade two or grade five in one school was not the same as grade two or grade five in another. Nor can they ever be until we find a more definite standard for measuring the results of school work.

The new type of written examination. Recent attempts to overcome the generally recognized weaknesses of the old-type examination have led to the improvements with which the teacher should be familiar. What is needed is a type of examination that will give a reliable test and furnish a basis for comparing pupils, classes, and schools. To accomplish this two general types of examination questions have been devised. One requires that the child recall something, or express an opinion or attitude or judgment. The other requires that the child be able to recognize a right or best answer when he finds it among a large number of possible answers.

1. The recall type. Several different varieties of questions have been developed in conformance with each of these two types. For example, under the first type we have the simple *recall* type of question such as:

1. The name of the inventor of the sewing machine was .....?
2. The author of *Evangeline* was .....?
3. The names of the candidates for the presidency in 1860 were .....?
4. The normal height and weight of a boy 10 years old is .....?

A somewhat more definite form for the recall type is the *completion* type of question, such as:

1. The legislative power of the Federal Government is vested in a ..... consisting of ..... houses, the one called ....., the other called .....
2. The Constitution of the United States, adopted in ....., consists of a ....., followed by ..... articles and ..... amendments, the last three of which concern ....., and ....., and .....

2. Selecting-the-right-answer type. Of the second type we have the *true-false* form of answer, such as:

1. Shakespeare and Longfellow were contemporaries. True False
2. Frogs and lizards are reptiles. True False
3. An adjective is a word that describes or defines. True False

Similar to this is the *multiple-response* form of question, such as:

1. A falling barometer suggests: clear, rainy, windy, cold, hot weather.
2. When food is suspected of containing dangerous bacteria we should keep it warm, keep it cool, freeze it, raise it to a very high temperature, dry it out in a dark place, or else not use it.

Another form of the *multiple-response* variety, called the *best-answer* type of the question, is also popular, such as:

1. The planet whose orbit is nearest to the orbit of the earth is:
   .....Venus
   .....Mars
   .....Neptune

2. Which of the following amendments to the Federal Constitution is most recent?
   .....the one affecting women's suffrage
   .....the one affecting liquor
   .....the one affecting freedom of speech and of the press

A third form of the multiple-response question is seen in the *matching-exercise* question, where the pupil is asked to indicate which of a group of names or events goes with each of a group of dates.

For example: Number the following events so that each will correspond to the proper date.

1. 1492 ...3...emancipation of slavery
2. 1789 ....1...discovery of America by Columbus
3. 1862 ...2....United States Constitution established
4. 1898 ....7...Abraham Lincoln born
5. 1845 ...6....Louisiana Purchase
6. 1803 ....5...Texas became a State
7. 1809 ...4....United States intervention in Cuba

Other forms of this type of test are matching men with movements or events, genus with species, words of like or opposite meaning, and many others.

The advantages of such examinations. These brief illustrations of the form in which questions can be prepared will serve to show certain advantages of this kind of examinations. First, it will be seen that there is nothing vague or indefinite about these questions. They call for specific knowledge, and so are more objective than the old-type examinations. This means that comparisons of the results are much more dependable. This is an advantage of great importance.

Second, while it takes more work to prepare a set of questions in these forms, yet very much more can be put into an examination of this sort because the time required for writing answers is greatly reduced. Incidentally, too, the work of scoring is made very simple.

4. The use of standardized scales and tests

Our need for accurate measures. Even with the added accuracy of measures as made by such examinations, we do not have in such tests an instrument that is perfect for all purposes. Aside from the fact that education is an individual matter the matter of individual differences is the largest consideration with which the teacher has to deal. Practically everything depends upon the teacher's ability, first, to understand these differences, and second, to organize and direct her work in a way that recognizes their significance. In large amounts many of them are easily recognized. Differences in height, weight, age, complexion, health, agility, physical strength, enthusiasm, mentality, knowledge, skill, language, manners, voice, willingness to work, moral stability, carriage, and posture are readily noticeable in any group of school children, if one will look for them.

The recognition of these differences is not a new thing in education. The oldest treatises and comments that we have on education recognized such differences, and to some extent recognized that they were educationally significant. It is only recently, however, that we have faced two very important points about them. First, what is the nature and extent of these differences; and second, how must the school recognize them?

Studies of their nature and extent have been going on for many years, and very intensively in recent years. The results of these studies have helped us to realize that some differences are innate and not removable, while others are due to differences in environment, care, and training, and can be reduced or possibly removed. A second very important aspect of these studies has had to do with the development of devices for measuring the amounts of these differences. We now have the mental tests for measuring amounts of

native intelligence; achievement tests for measuring amounts of acquired knowledge or skills; and physical and physiological tests for measuring health and physique.

The object of all these studies of individual differences, their nature and amount, is that we may intelligently shape our scheme of education. The school should stop trying to do things to children which nature has made impossible. We should adjust the scheme of training to the limits that nature has set. This statement has an even wider implication, namely, that for doing the things education can do there is a best way, a way that runs least in conflict and most in harmony with nature.

Differences that are readily observed are large differences — differences that we are forced to recognize in management. For example, John is so much duller mentally than his classmates that he does not understand an assignment. The teacher cannot fail to see this. James, however, is also dull, though not so dull as John. The teacher does not sense this. James vaguely feels it and for a time struggles against the odds. As he gradually fails, the teacher thinks that he is lazy and, instead of sympathizing with the boy who is trying hard with all the mind nature gave him, urges him on, or even punishes him for dereliction. All this because the teacher had no way of knowing that James was working up to his limit. Henry is a bright boy. He learns easily and wastes a part of his time. He causes his teacher no anxiety, and so she fails to see how he is wasting energy and acquiring the habit of "half-trying." All this, too, because she has no means of recognizing the small difference between Henry and the average pupil.

The teacher's need for accurate measures. These little differences in native intelligence are very real, and differences in achievement are quite as real. School machinery and methods should be sensitive to both kinds, but they can-

not be unless the schools make use of the refined instruments of measurement known as mental and achievement tests.

Let us assume that the teacher is familiar with the best tests and that she knows how to use them. When should she use them? The answer is:

1. When she first takes a position the teacher should, as soon as possible, get intimately acquainted with her pupils — their mental, physical, educational, social, moral, and æsthetic equipment. If test and other records are available she should study them. If not, then she should begin a program of study, including the use of tests. She should make careful observations of the children at work and at play, noting any habits, attitudes, weaknesses, or strengths that may affect their success.

   The purpose of these initial studies and observations is to learn what the class is capable of doing, basing upon mental-ability tests; what they have achieved in their studies, basing upon educational tests; what physical defects they have, basing upon physical measurements and inspection; what interests and attitudes they have toward school work and toward social standards, basing on careful observations and checking with test results.

   As a result of these surveys the teacher will have located any pupil whose classification or grade position is in question. Such cases she will take up with the principal. Second, she will, by comparing mental with educational scores and checking with her observations, find what pupils are working up to or beyond capacity. She will find the Henry and James, as well as the John above referred to, and will take note of each in her assignments and in her supervision of study. She will locate the need for correcting speech defects, poor language habits, poor postures, slovenly personal habits and dress, laziness, selfishness, and bad manners.
2. Mental tests should be repeated where earlier results seem to be in doubt. They should be used for new pupils. Where reclassification of a pupil is under consideration, whether it be with a view to extra promotion or to demotion, special care should be exercised, either by repeating the test given earlier or by using a different test.

3. Achievement tests should be used at intervals to determine progress, to check against grade norms, and as a partial basis for determining promotion.
4. Physical measures should be repeated at intervals in all cases where there is evidence of illness, under-nourishment, or growing physical defect of any sort.

Possible abuses of tests. The making of tests has required many years of careful scientific work. As schoolroom tools they have very great value when rightly used. We must remember, however, that a simple and useful tool may be dangerous in the hands of one unfamiliar with its nature and purpose. This applies also to tests. As a measuring device the test is simple, but its misuse is easily possible. Certain misuses seriously vitiate the results, and certain others do harm to the children themselves. A few cautions to the beginning teacher are in place here, since this book cannot offer a lengthy discussion of tests.

1. No teacher should consider herself equipped for service in a modern school who has not some knowledge of the theory of tests, and a larger knowledge of how to use tests. This will call for more than a casual reading of one or two of the books listed at the close of this chapter. The teacher should have a thorough college course on the subject. In the absence of this she should master such a book as Terman's *The Measurement of Intelligence* or Freeman's *Mental Tests*, and at least two or three of the recent books on educational tests.[1]
2. Tests not given exactly according to instructions are misused and the results are not to be trusted. The talkative teacher must restrain herself when giving tests. The measures in the test are based upon the instructions set down, and not on a nice chatty explanation which the teacher thinks would be better. Also the time limit means what it says, not fifteen seconds, or a minute more or less. The teacher who really knows something about tests will not try to improve

[1] Suitable selections for this purpose may be made from titles listed at the close of this chapter. The volume by Monroe, De Voss, and Kelly will prove very helpful.

on the author's prescription for giving them. The surest evidence of ignorance is the tendency to disregard the exact directions.

3. What is true of giving tests applies also in scoring them. The instructions must be followed exactly as set down.
4. The teacher must not make a fetish of test results. These instruments are not perfect, and if they were they probably would not give us measures of all the things that count for success in school work. Much less do they cover all that counts for success in life. After seeing John's score in a mental test the teacher should not become a fatalist, therefore, and feel that John is doomed to a narrow place in life. The fact that John's I Q is a bit below average does not prove that he cannot attain average success. That he probably cannot become a Plato is of little consequence. Neither can his teacher, nor any one of ten thousand other boys or teachers. We need to remember that no small part of the world's work will be done by boys of John's type.
5. Pupils should not be made fatalists in this matter either. The teacher who purposely imposes such a conception of tests on a child and tells him that he is below average, has done an injury for which dismissal would be too mild a punishment. The best rule to follow is, not to give the child or his parents the mental-test score. It is enough to tell John that he did well, or very well, or that he did only fairly well in the test. And no reference need be made to its having been a mental test. If the parents want the facts, give them of course, but only privately, and with some explanation of the limits of their significance.
6. Finally, give tests only when the results of tests are needed as a guide to action.
7. The public has a right to be a bit critical of tests, for when we step into schools we find that grade and class groups do not seem to show the homogeneity that should be possible if we were really to apply our test results.

Some things we have learned from the use of tests. What the teacher may be expected to accomplish by the use of tests may be judged to some degree by what their use has brought to light. Tests have been used by experimenters,

by teachers, by executives, by supervisors, and by survey experts. From the results we have learned several important things. For example, we have learned that the children in grade V range in abilities in a given subject to as low as average third-grade, and as high as average eighth-grade pupils; and, worse yet, this applies to individual classes. This wide variation is true of any grade, and in any subject for which standard tests have been made. We have found, too, that there is a rather high correlation between mental-test and achievement-test scores. This seems to show that high mentality goes with high achievement, which suggests that mental scores ought to be made a part of the basis for classifying pupils. In spite of this we find in most schools the wide variation above noted.

Our mental tests have shown us that we have a wide variety of mental ability in our schools, and that schools and communities vary much in this respect. This seems to argue that curricula should be adjusted somewhat in accord with these differences. In our best school systems we find some effort in this direction, yet in many cases the facts are totally ignored.

We have found that there is some correlation between mental scores and delinquency.[1] If this is true, then the schools have a means of making an intelligent hunt for potential delinquents. If we find them we should be able in time to determine whether education can forestall delinquency.

By our diagnostic subject tests we are able to find quite specifically any weaknesses our pupils may have in their studies. By this means we are able to learn exactly what needs emphasis in teaching. A child shows high speed and

[1] See: Miner, J. B. *Deficiency and Delinquency;* Bronner, Augusta F. *A Comparative Study of Intelligence of Delinquent Girls;* Burt, Cyril. *The Young Delinquent.*

low quality in writing, or high speed and low comprehension in reading. The point for emphasis in instruction is then clear. Our present wide variety of tests offers numerous refinements of this sort of diagnosis. The question is, Does the teacher use these findings?

Our scales and tests provide a means by which the child may check his own progress. Plotting this progress curve is not only interesting but decidedly stimulating to a child. Likewise these scales and tests furnish a basis for comparing classes, schools, grades, and systems.

These uses all seem obvious and simple, yet they are new, and many teachers have not learned how to follow a test through to the end — the end being an actual change in organization or method or management. There are now available several hundred tests. The number is increasing yearly. They are easily available and there is an extensive literature on their use, a liberal sample of which is listed at the close of this chapter.

5. Other means of measuring results

Qualities which are hard to measure. There are many features of school work that cannot be checked up by ordinary examinations, or even by the best improved scales — such for instance as neatness, the movement of pupils, blackboard work, light, temperature of room, spoken language, correct posture, and the influence of tardiness, and ill health. To get some check on problems of this character is extremely desirable. In one school we find a cast-iron system of classroom mechanics, while in another there will be nearly the opposite. In one place manners, neatness, and correct speech and posture are carefully guarded, while in another they receive little or no attention. Some kind of standards, even though they may not be applied universally, ought to be developed by every teacher for her own use. In

order to do this she must set about studying the mechanism of her school, with a view to working out the very best way to operate every detail, and when that best way is found, try to develop standards of performance and hold herself and her pupils responsible for living up to them.

To do this the teacher will need to study her own and other schools, as well as books and reports. Systematic visiting or observing of other schools for the purpose of comparing her own practice with theirs is most desirable. From such trips the teacher should carry home the best ideas that she has gained and try them out in her own work. From books and reports of investigations she will gather other facts which will help her to perfect her work. In one school she will get a new idea about handling wraps or collecting papers; in another she will discover a better plan for developing neatness in board work or for correcting oral speech; in a book on school hygiene she will learn the proper standards for ventilation, temperature, light, and seating of children. She will perhaps keep a chart illustrating correct sitting and standing positions, and watch to see how rapidly she can develop habits in her pupils that will bring them up to this standard.

Desirable schoolroom standards. It is only by being everlastingly on the alert for the best and most educative methods that one can hope to attain a reasonable degree of perfection in these features of school work. When a teacher has decided on a method, then the next step is to discover the least amount of time the performance should consume and set that up as a standard to be maintained. When certain efficient monitors have been able to collect and distribute supplies or wraps in a given time, then set that time as a standard. If James has placed his work on the board in a neat and orderly manner, leave it on the board a few days, calling attention to that as a standard per-

formance. When a child has handed in a neat and orderly paper, keep it for future reference. Comparing with past records is a good practice for both teacher and pupil. The standard for attendance and tardiness should always be 100 per cent perfect, as it should also be for clean hands and faces.

The main idea to be insisted upon here is that in these processes, just as in writing, spelling, and arithmetic, we need some definite standards by which to gauge our work. Each of these processes plays its part in the sum total of the child's training. Some of them are directly, others indirectly educative, but all are important, and it is the teacher's business to maintain each at its very best. This she can never do without an earnest study of her ways, means, and results.

6. Summary of Part III

In Part II we were thinking from the point of view of the individual child in order to establish the idea that the school is made up of and for individual children. In this part we have thought of the child in his relationships to the group, and consequently of the problems of group organization and control. How to organize and to manage the physical aspects of the school, the children, the curriculum, the day's work, the study and recitation processes, and finally how to measure the effectiveness of our machinery and the processes we have directed, have been our problems.

In our examination of the necessary machinery of organization we have insisted that while the chief purpose of all such machinery is to serve as a means, yet there is no reason why much if not all of it shall not be in itself educative as well.

This applies throughout our discussion, but in particular to the machinery of grading and promotion, where the educative value of group as opposed to individual teaching is especially pointed out. This does not mean that individual differences are ignored. Quite the opposite, in fact, for the most essential of these differences are made the basis of the grouping; and flexibility of the plan, in terms of these differences, is likewise provided for.

In discussing the organization of the curriculum we have pointed

out the distinction between the traditional and the modern course of study, showing that to-day social and pedagogical principles determine our selection and organization of materials, and that as a consequence the curriculum is not only thoroughly elastic but is in a constant process of remaking.

Our study of the daily program was designed to clarify the principles involved in organizing the day's work, and to illustrate their application in typical situations. The problem of evaluating subjects, of programming studies in terms of their bearing upon the question of fatigue, and the advantages of carefully planned work were discussed as they enter into the practical tasks of the day.

In outlining plans for managing the group at study special emphasis was laid upon the idea of study outside as well as inside the school, the purpose being to establish the largest possible number of specific work habits. The problems of assignment, study, and recitation were differentiated, and special stress was laid, first, upon setting the class to work at specific problems, and seeing to it that they had a real motive for study; and second, upon directing them in methods of finding, organizing, and verifying facts.

The management of the recitation is the real test of teaching efficiency. The teaching aim and the aim of the learner must be clear, and plans must be devised for their attainment. The child's methods of work and the character of his response are to be the teacher's cue for giving directions. Testing is not to replace teaching, drill is not to be overworked, the teacher is to learn the art of listening and to avoid telling when a mere suggestion will suffice, and children are not to depend solely upon textbooks.

Finally, we have discussed the whole question of measuring the efficiency of school work. Its importance, the wide variety of processes and products to be measured, and methods and devices for measuring them were outlined. Special emphasis was placed upon the practical importance of statistical ways of stating values, and upon the use of scientific standards and scales.

If the teacher will supplement what has been so briefly presented in these chapters with further reading, and especially with careful observation of her own work, it is believed that the machinery of school management will take on a new meaning.

QUESTIONS FOR DISCUSSION

1. What are some of the school processes and products that are difficult or impossible to measure effectively?
2. It has been said that the school has to deal with psychological, biological, sociological, economic, and educational phenomena. Give examples of each that you think would be met with in the management of a school.
3. Explain why it is more important now that we should be able to measure the results of teaching than it was a half-century ago.
4. Why has the teaching profession been slow to undertake a scientific measurement of educational achievement?
5. How would you test out the efficiency of the following plans:
   a. For entering and leaving the building?
   b. For distributing and collecting wraps and supplies?
   c. For keeping the room neat and orderly?
6. If you were visiting a school with a view to evaluating its results in teaching coöperation, leadership, politeness, and correct speech, where and in what form would you expect to find the necessary facts to work by?
7. The school aims to produce culture. In what ways would you look in a school for evidence that this aim is being achieved?
8. What ends should the formal examination serve? How does the examination differ in nature and purpose from the test?
9. Which and how many of the above questions are fact questions? Which call for application or interpretation of facts?
10. State the most important ways in which the examination is inadequate for measuring results in the school.
11. What have investigations shown as to the reliability of the marks which teachers assign to examination papers?
12. What is meant by a scale for measuring the results of teaching? Explain the advantage of such an instrument over the ordinary examination.

PROBLEMS FOR STUDY

1. Prepare a seventh-grade history examination covering a selected period of history, forming the questions by each of the several methods illustrated in section 3 of this chapter. Apply these methods in arranging an examination to cover Part II of this book.
2. Suppose an entering class of 20 pupils showed the following mental ages and I Q's. What suggestions would you receive that should affect the teaching of these pupils?

Pupil	Mental Age (yr. mo.)	I Q	Pupil	Mental Age (yr. mo.)	I Q
1	3–8	73	11	6–1	100
2	3–10	70	12	6–2	100
3	4–1	78	13	6–4	98
4	4–7	76	14	6–6	104
5	4–11	79	15	6–8	107
6	5–3	84	16	6–9	103
7	5–8	88	17	6–9	111
8	5–9	89	18	6–11	121
9	5–11	92	19	6–11	113
10	6–	98	20	7–1	117

3. Make a list of educational tests which would be useful to the teacher as a means of diagnosing the weaknesses of her pupils in the school subjects.

Give one of these tests to a class, score the papers, and write an interpretation of the results.

REFERENCES FOR ADDITIONAL READING

Chapman, J. Crosby, and Rush, Grace Preyer. *The Scientific Measurement of Classroom Products.* Boston, Silver, Burdett Co., 1917.

Dickson, Virgil E. *Mental Tests and the Classroom Teacher.* Yonkers, N.Y., The World Book Co., 1923.

Douglas, Harl. *Modern Methods in High School Teaching,* chaps. XII, XIII. Boston, Houghton Mifflin Co., 1926.

Freeman, Frank N. *Mental Tests, Their History, Principles, and Applications.* Boston, Houghton Mifflin Co., 1925.

Gregory, C. A. *Fundamentals of Educational Measurements.* New York, D. Appleton & Co., 1922.

Hines, Harlan C. *Measuring Intelligence.* Boston, Houghton Mifflin Co., 1923.

Kelly, Truman L. *Interpretation of Educational Measurements.* Yonkers, N.Y., The World Book Co., 1927.

McCall, Wm. A. *How to Measure in Education.* New York, The Macmillan Co., 1922.

Monroe, De Voss, & Kelly. *Educational Tests and Measurements* (revised and enlarged edition). Boston, Houghton Mifflin Co., 1925.

Monroe, W. S. *Measuring the Results of Teaching.* Boston, Houghton Mifflin Co., 1918.

Monroe, W. S. *The Theory of Educational Measurements.* Boston, Houghton Mifflin Co., 1923.

National Society for the Study of Education. *Twenty-First Yearbook*, parts I and II.

Pintner, R. *Intelligence Testing.* New York, Henry Holt Co., 1923.

Ruch, G. M. *The Improvement of the Written Examination.* New York, Scott, Foresman, 1924.

Sears, Jesse B. *The School Survey*, chaps. XIV, XV. Boston, Houghton Mifflin Co., 1925.

Stern, Wm. *The Psychological Methods of Testing Intelligence.* (Tr. by G. M. Whipple.) Baltimore, Warwick & York, 1914.

Terman, L. M. *The Measurement of Intelligence.* Boston, Houghton Mifflin Co., 1916.

Terman, L. M. *The Intelligence of School Children.* Boston, Houghton Mifflin Co., 1919.

Trabue, M. R. *Measuring Results in Education.* New York, American Book Co., 1924.

Wilson, G. M., & Hoke, K. J. *How to Measure.* New York, The Macmillan Co., 1920.

PART IV

THE TEACHER THE INSTRUMENT

CHAPTER XVI

THE TEACHER'S PERSONALITY

Outline of Chapter

1. The problem of Part IV: The teacher and the task — The personal question.
2. The meaning of personality: The nature of personality — Positive and negative types — Positive and negative teachers — Frankness and sincerity — Sympathy — Tact — Self-sacrifice — Optimism.
3. Making the personality effective: Good breeding — Personal appearance — Good manners — Conversation — Correct English — A good voice.
4. Training for personality: Practice decision — Set up right ideals — Develop specific habits — Observing, learning, growing.
5. Summary — Questions — References.

1. The Problem of Part IV

The teacher and the task. It would seem that there is no reward too great for society to pay to the man or woman who is competent to bring to a practical realization in the school the ideas and principles which have been set forth above. The teacher who can understand and appreciate child life, and who can devise a scheme of organization and management such that a natural and normal educative process will result, will have rendered to the children individually and to the state a service for which neither can ever fully compensate. The task which has been sketched out here at some length is by no means a simple one. From the standpoint of hard work, from the standpoint of the technical knowledge and skill demanded, as well as from the standpoint of the higher human values involved, it is a task worthy of the very best men and women we have.

The personal question. What kind of man or woman must I be if I would enter this field of work? is the question every teacher should ask herself.[1] What kind of man

[1] The practical importance of personality in the teacher's equipment has been brought out by numerous investigations, all of which have shown

or woman would the state have me be? Even if these questions could be fully answered, which they cannot be, it is doubtful if our ideal teacher would ever be found. Yet it is worth while to try to set forth at least some of the essential elements without which a reasonable hope of success is impossible, for after all it is only by knowing what it is we wish to attain that we are able to work intelligently toward its attainment. It is merely another case of attempting to set up a clear aim and to establish a standard or basis for measuring our own efficiency.

There are at least five of the larger aspects of this problem which are worth considering here. First, the teacher's personality, which every one would set down as of the very first importance; second, the question of her professional qualifications and growth; third, her health and physical vigor; fourth, her relationship to the problems of supervision, and fifth, her relationships with all others with whom she must work and her ways of handling the details of her daily tasks. These we shall treat, in order, in the five chapters of this last Part.

2. The meaning of personality

The nature of personality. It is not necessary here to enter upon a philosophical discussion of personality, or to seek for a very exact definition of the term. We all use the word constantly, and know roughly and for practical purposes what it means. We think of personality as some thing we possess. We say of a man that he possesses, or has, a good or a poor personality, and commonly include in the term all that goes to make up what the man really means to us. If his worth is great in our opinion, then we believe

conclusively that a strong personality is one of the chief elements in success. For a résumé of such studies see *Fourteenth Year Book of the National Society for the Study of Education*, part II.

him to be thoroughly trustworthy in every way, and, in addition, that he is energetic, cheerful, aggressive, and above all gentle, manly, and clean. On the other hand, the grouch, the chronic complainer, the man without a program or an aspiration, the slouchy and ill-mannered man, is repulsive to us, and we say his personality is weak or disagreeable.

Our first concern is with the extent to which this possession is inherited or acquired. Such a question cannot be examined at any length here, but we should keep in mind one thing, viz.: that whatever we may possess by inheritance must undergo a process of development. Biological investigations show that environmental factors furnish the conditions in which this development takes place, and modify, at least to some extent, the course of development. So even if we cannot determine what characteristics we shall inherit, we can to a large extent control the environment in which our development shall take place, which is to say that if we choose to do so we can improve our personalities. This is the all important point here for us, for if improvement were not possible then any discussion of the subject would be superfluous.

What, then, is our problem? To what specific ends shall we exercise this control over our surroundings? What traits or qualities of our personal make-up shall we attempt to cultivate? These are questions which every teacher should seriously put to herself and try seriously to answer in terms of well-established habits, attitudes, and ideals.

Positive and negative types. We are all familiar with people belonging to two general types of personalities, the positive and the negative. The possessor of the one type is an executive, a director of affairs; that of the other is a follower, who merely fits into another man's program. The one knows how to make a decision, while the other stands

forever in doubt. In an argument the one goes straight to the point, dealing only with essentials, while the other qualifies and requalifies every statement until finally he has drifted quite clear of the main issue. The one ventures something in life; the other is afraid of risk, waits till the fight is won before he is quite sure which side he believes in; then, unconscious of his own weakness, he tries to ride to victory. The one believes in something and knows it; if the other has any serious convictions he does not seem to know it. When the one reads or travels he gains in power, for with him to know means to act. His knowledge is dynamic. With the other knowledge means at best accumulated information only. The one possesses self-confidence, and inspires others with a belief in his ability to lead; the opinion of the other is rarely offered or asked, and never followed. The one lays plans for action, and turns up a chance for himself in life; the other follows the beaten path, and waits for his chance to turn up. So one might draw an endless number of similar illustrations from practical life, and everywhere it would be the same picture of energy, courage, conviction, and action, *versus* weakness, indecision, and inertia.

Positive and negative teachers. To be sure this illustrates the extremes of the two types, but they are not unfamiliar pictures to any of us. We know them both in the political world; we know them in business; we know them in religion; we know them in social work; we know them in law, in medicine, and in teaching. The positive type in the schoolroom rarely sends a case of discipline to her principal. She is not afraid to tell the children she does not know. Work is not drifting in her room, it is going per schedule. Her classes in civics learn what is going on at the city hall, and are familiar with the practical problems of their own city, district, or county government. The positive teacher

appears energetic, and seems to believe in her work. She is industrious, becomes a part of her community, and is sought after by other communities. On the other hand, the negative type of teacher is constantly consulting her principal about trifling details, and expects him to take care of all cases of discipline. She dodges the child's question rather than admit that she does not know. The program in her room is either ironclad, or the other extreme. Her class in civics will know the term "mayor," but not what their own mayor is doing. Such a teacher dreads the visit of the principal or the parent, and seldom makes a serious impress as a member of her community.

Frankness and sincerity. The essential qualities of a good personality must include frankness and sincerity. We like the man or woman who is frank and honest, and we dislike the poser. The one inspires confidence, the other mistrust. The advice of the one will be listened to even by his enemies, but not so that of the other. Men such as Lincoln and Gladstone, who have been universally loved and trusted even by their enemies, were not shammers or palaverers, or namby-pambys or make-believes. They worked, and, when necessary, fought, in the open. Sincerity implies loyalty. Without loyalty to high purpose and to the policy of superior school officers, a teacher is not only personally miserable but utterly impossible as a part of the institution. Sincerity also implies courage, and the man who has the courage of his convictions is respected, even though his convictions may be wrong. The sincere teacher is the one who is impartial in her work with children. She does not try to bluff or frighten. If she disagrees with an order from her principal she may protest, but if so it will be openly to him and not complainingly to her pupils or fellow teachers. In any case she will carry out the order to the best of her ability.

Sympathy. Calm and intelligent sympathy, as opposed to mere sentimentalism, is for the teacher, more perhaps than for the soldier or business man, a quality of personality which is indispensable. The teacher's business is not merely to accumulate information, but to impart it to others. This means that she must enter most intimately into the lives of others. She cannot do that without the ability to put herself in another's place, to think and feel as her various children think and feel. Nothing demands a keener insight and imagination, and a greater amount of self-forgetfulness, than the claims of a room or playground full of children, some of whom are strong and some weak, some happy and some sad, some from good homes and some from poor ones, some aggressive and some bashful and afraid, and each with his own little likes and dislikes, his own little victories and defeats. To be able and ever ready to put one's self in any one of these thousand possible positions is to possess that invaluable human quality we call sympathy, which is a substantial element in leadership.

Tact. The man who has a ready power for appreciating and doing or saying the thing which circumstances require has a peculiar power of discernment, a discriminating sense, a mental touch, that will tide him over many difficulties in life, and smooth for others the social path which their own uncouthness has ruffled. Between this power and the power to deceive there is a wide gulf. Tact is not hypocrisy, or cant, or insincerity; it is not the power to evade, or distort, or pretend; it is not craftiness, or cunning, or trickery. *Tact is good sense and keen insight and quick decision at work in critical places making needed adjustments.* It is diplomacy in a wholesome sense, it is a swift application of the principles of mediation, and it forces others to speak or act with discretion. It is quick, accurate, and skillful self-direction. It is clean strategy.

If such qualities are essential in business and politics they are more than important in teaching. The teacher is primarily an adjuster. She stands between the child and the future citizen, between the home and the State. She must meet children, parents, school trustees, superintendents, principals, and educational meddlers. She cannot do this if she is not quick to sense discord and skillful in applying the needed adjustment.

Self-sacrifice. Another element in personality that is always admired is a willingness to serve without praise. Schiller declared that ingratitude is the world's pay, and that is very often true in the kind of service a teacher must render. To be generous without praise is not easy, when so many men seem to win by egotism and self-advertising. We know of course that a quack wins by the method of blatant self-advertising; but we know, too, that few if any of our really great men have won their way to fame by such methods. It is not the person who seeks martyrdom, either, that we have in mind. Franklin once said that after he had tried hard to overcome his pride and to discipline himself to be humble, he was surprised to discover that he was proud of his humility. It is in such ways that people often deceive themselves and only feign self-sacrifice. This is the cheapest sort of posing. The emphasis must be upon service. If something needs to be done, do it, not to be seen, but in order that life somewhere may be better.

However, as genuine self-sacrifice does not mean humbleness for its own sake, neither does it mean that we shall go to the extreme of forgetting self entirely. We are not true to society in a large sense when we fail to treat ourselves as well as we treat others. While we are giving freely of our time and energy to lift others to a higher plane of living, we must not forget that the obligation to lift ourselves is quite as great. It is sometimes easier to let a child go home disap-

pointed and discouraged than it is to help him over his little mountain of trouble. It is sometimes easier to allow our minds to go wool-gathering by the open fireside, than to force them to spend the evening in solid work. Society wants both these needs to be met. The one involves complete self-forgetfulness, the other forgetfulness of the narrower self only. In a very real sense they are equally unselfish and important.

Optimism. However honest and self-sacrificing a man may be, if he is not optimistic, if he does not thoroughly believe in humanity and in himself, if he has no enthusiasm, then he should have no part in directing the training of children. Building air-castles may seem a fruitless enterprise, and so it is so far as its influence on the landscape is concerned, but to the builder it means everything. To him it is essentially a process of self-development and self-realization. The optimist trusts himself and trusts others. The pessimist thinks the world "has it in for him," and doubts the good intentions even of his friends. The optimist fights for a better city government, while the pessimist sits and complains of the present bad one. Everywhere it is the optimist who proposes a plan of action, to which, from his cave of despair, the pessimist expresses a doubt as to its feasibility.

The schoolroom is no place for the man or woman who is forever crossing a Slough of Despond. It is no place for the chronic grouch to chant his tales of woe. A pessimist is rarely constructive. He is never ready to coöperate cheerfully — to him the world is all dark brown. In the schoolroom we need leaders, men and women who are looking up, not down, who are glad they are living, who have a sense of humor and can smile at difficulties. We need men and women who can understand and apply Stevenson's recipe for joyousness, which tells us to "Take the old world by the

hand and frolic with it." Only such people are wholesome companions and leaders for children.

3. Making the personality effective

Good breeding. The above elements of personality may not be mutually exclusive at every point, and they may not be fully comprehensive of all we sometimes mean by the term, but without them the teacher would be handicapped in a fundamental way. On the other hand, a teacher may possess them all in good degree and still fall short of being our ideal teacher for want of skill in their use, for want of those simple acquisitions implied in the terms "good breeding," "good manners," "address," etc. In his discussion of the education of a gentleman, Locke states the importance of these in forceful language when he says: "Breeding is that which sets a gloss upon all his other good qualities, and renders them useful to him, in procuring him the esteem and good will of all that he comes near"; and again: "Virtue and parts, though they are allowed their due commendation, yet are not enough to procure a man a good reception, and make him welcome wherever he comes." [1]

To be a "plain blunt man" does not mean to lack refinement; nor, on the other hand, do elegance of manner, dress, carriage, and conversation imply a lack of force and directness in character. To make our solid virtues count, to get results with all the good there is in us, we must have an open sesame to our social world, to the world of men and women; and that open sesame is to a large extent knowledge of social standards in these things, and skill in their use.

Personal appearance. Teachers who do not appear well, whose clothes are not in good taste, whose hair, teeth, and nails are not well cared for, men who do not shave daily, are at a great disadvantage in applying for positions, and also

[1] Locke, John, *Some Thoughts Concerning Education.*

in keeping them.[1] These are evidences of lack of gentility, and they can never pass unnoticed. Cleanliness and good taste in dress are fairly good symptoms of clean morals and a habit of using clean language, and always mark the genteel, the socialized individual.

Good manners. There is much less of the ceremonial in the manners and customs of to-day than there was in the age of chivalry. Democracy in government has brought with it even greater democracy in social relationships, but there is still a social code which has become a fixed mode of procedure for all, and to ignore it is to be labeled as ill-mannered. For a lady there is no better insurance against insult than correct manners, nor for man or woman is there a better key to the confidence of those whom they would influence. We cannot all be familiar with the etiquette of international diplomacy, but we can and must know how to meet people, and how to entertain and be entertained. We must know the etiquette of the parlor, the dining room, the theater, the church, and the street.

Conversation. To be able to converse pleasantly and intelligently is almost a prerequisite in any position of leadership, and a little study of the simple principles of conversation is not a frivolous occupation for a teacher. There can be no pleasure or profit, either, in a conversation which does not hinge upon a common interest, and to be able to discover that arousing and holding interest is the very beginning of skill in conversation. The teacher, the business man, the insurance man, and the socialist are four people who will do well to remember that the line of least resistance for them

[1] By an investigation of the "Characteristics of the Best Teachers Recognized by Children," Kratz found that in every grade except one, more than fifty per cent of the children referred to the dress and personal appearance of the teacher as among the most important characteristics. H. E. Kratz, *Studies and Observations in the Schoolroom* (Boston Educational Publishing Company, 1907), chap. v.

— which is inevitably "talking shop" — is not always the route that leads to that interest. Again, a conversation will be unpleasant if dominated entirely by one person. Some people try always to lead the conversation. Such a person should frequently practice the art of following instead. In following one can contribute without being a mere namby-pamby. If the conversation is about a matter of business, then directness and brevity are the first essentials. Speech-making, gossip, and cheap wit are everywhere evidence of boorishness. It is far better to be simple and frank, and to talk about only such things as we know about, for then we rule out the overdramatic, the chatter, and the small talk, and leave plenty of room for real brilliancy, genuine wit, and true social intercourse.

Correct English. Correct English is essentially a part of good manners and good conversation, and needs to be mentioned here not only for its importance in these respects, but for its business and professional value as well. A very large percentage of written applications go into the waste-basket because they are poorly worded. That means that the world regards skill in written expression as an index to character and training in general. This is a plain but significant fact which the teacher cannot ignore. Clear and forceful English, either written or spoken, has a force and a charm that cannot be denied. President Wilson's reply to the peace proposals of the Pope was a subject of comment the world over, not only because he restated clearly the position of the United States in the great world war, or because he answered an important communication with plain facts, but also because he couched his answer in the choicest of English. As one reads that letter he can fairly feel the heart throb of our democracy, so clear is the thought, so forceful and direct are the words, so delicate and refined is the phraseology. The teacher has constant need for this instru-

ment of good English, and constant opportunity to broaden her power to serve as she develops skill in its use. Probably no one accomplishment, after good manners, counts for so much with a teacher as the ability to express herself in clear and forceful English.

A good voice. The teacher is so constantly engaged in talking that it seems almost trite to suggest here the importance of a good voice.[1] And it would be if it were not true that one general criticism of teachers is that they have disagreeable, raspy voices. There is no doubt that children as well as adults are distracted and annoyed by nervous, throaty tones. Nervous, mental, or bodily fatigue is likely to show first of all in one's voice. The voice will be pitched higher, the speech will become louder, and the articulation poorer, until finally, in extreme cases, the speaker will seem to have lost his poise entirely. On the other hand, we are all familiar with the soothing effect of a soft, mellow voice under good control, and we recognize what a splendid asset it is in a classroom.

4. Training for personality

The great question is, after all, how am I to go about it developing my personality so that I will possess the charm and force that are essential to leadership? Can I will to be a positive as opposed to a negative type of person? Can I put aside a disposition to be bashful or secretive, and learn to be frank and sincere? Can I learn to be sympathetic, tactful, and self-sacrificing; and can I put away my gloom and doubt and become an enthusiastic believer in life's possibilities? And if I can acquire these excellent qualities, how can I make them tell in winning for myself a place of power and

[1] *The Speaking Voice*, by Katherine Jewell Everts (Harper & Bros., 1908), will afford helpful suggestions. Also *A Hand Book of Oral Reading*, by Lee Emerson Bassett (Houghton Mifflin Company. Boston, 1917).

influence in the world's work? Can I become interested in making my personality attractive? How shall I improve my appearance, and manners, and conversation, and use of English, and how can I develop a good voice?

Practice decision. Certainly there are no patent recipes for doing any of these things, and it should be said at once that we cannot make something out of nothing. What we have by inheritance is our foundation material, back of which we cannot go, and in the possession of this material we have not all fared alike. But because we cannot all be Newtons or Shakespeares we should not sit and mourn; instead we should set about to become all it is in us to become. Ours is the task of building the superstructure and not the foundation, and we can never find the possibilities of that foundation until we begin to take its measure in terms of life's problems. Every man has it in him to pull against the cross currents of the world, and if he neglects or refuses to pull, then he must be content to drift.

Our task, then, is to exercise this power to choose our course. Instead of waiting like Micawber for things to turn up, we must go about turning them up for ourselves. We must learn to make decisions, and to follow them up with action. Scarcely a moment passes in which we are not presented with the possibility of making a choice in something. From morning until night there is a constant flood of ideas coming to our minds in response to the thousand practical situations we find ourselves in from hour to hour. The negative type of person waits for these ideas to settle themselves, and then acts in terms of the one on top. This is lazy and cowardly. We should examine critically every idea we have and seek for others, then out of this complex we should choose the one which is to guide our action, and have the courage to stand for the consequences.

The best way to begin is to seek every possible oppor-

tunity for making and carrying out a definite decision. Shall I arise now and prepare for the day's work, or shall I sleep a while longer? Why wait for a decision to get itself made? Decide, and get up! Why spend a week trying to make up one's mind what dress to wear to a party? Decide, and then clear your mind for other things. Don't go to the principal to find out what to do about a simple case of discipline, but force yourself to settle it alone. These seem like trifling details, and so they are for people with executive ability, but they are not trifling when deciding them consumes a large percentage of a teacher's time and energy. It is by being positive, by deciding matters with dispatch, by taking a definite stand in respect to small things, that we may hope to overcome the indecision, weakness, and inertia of a negative personality.

Set up right ideals. It is a good practice to try occasionally to imagine the kind of person you would like to be, and the sort of niche you would like to fill in the world. If I should like to be a great teacher, then just what does that mean, and what is my present self like when measured in such terms? Am I as frank and sincere, as sympathetic, tactful, unselfish, and optimistic, as I should like to be? Am I as charming in my dress, manners, and conversation as I make this hero of mine? Such self-examination forces one to define his ambitions and aspirations in specific terms, and this is precisely what we need. So often our ideas are only a vague longing to be great, or good, or clever, and we forget that mere dissatisfaction with our present selves — for that is about all such longing means — is not enough. It is not enough merely to be on the way. We must know where we are going if our steps are to count.

Develop specific habits. Ideals, however well-defined, will serve as little more than disturbers of the peace unless we begin to take steps to attain them. These steps are to be in

the form of specific habits of conduct, habits of being sincere, sympathetic, tactful; habits of correct dress, manners, and conversation. Only a few illustrations are necessary to suggest where and how to begin. The first of these is that we are not to wait and look for something great or startling to begin with. To develop habits of sincerity we need to do two things: first, stop pretending to be what we are not; and second, practice being better in what we are, and learn to give good measure in all we do.

If we will apply these general principles throughout the day, and every day, soon we shall have the habit of greeting our children with a frank good-morning, and we shall apply ourselves more earnestly in the preparation of our lessons, and we shall learn to say yes when we mean yes, and no when we mean no. We shall cease trying to "bluff," and say frankly, "I do not know, but will try to find out for you" (and shall not forget the promise), and we shall be zealous for the progress of every child under our care.

We cannot become sympathetic by waiting to be moved to action by some great catastrophe. We must take note of small opportunities. They appear on the playground and in the classroom every day. Bashful little Mary has come to school for the first time, and feels very lonely because no one seems to know her or to care to have her join the games. She needs a friend to drive away the loneliness, and to help her to fit into the new life. James is behind in his work and is discouraged. Lend him a hand for five minutes after school, and send him home feeling that now he is going to win in his fight to keep up with his class. Mrs. Brown calls to scold you for punishing her son. Speak kindly to her and seek her coöperation.

Observing, learning, growing. Similarly with tact, self-sacrifice, and optimism — it is in the lesser incidents of the daily work that we should seek opportunity to begin. It is

not necessary constantly to antagonize people. Nagging at the children, scolding, getting angry, playing the spy, are the opposite of tactful procedure. Tact in teaching forbids that we shall always tell John what he wants to know, and insists that we merely put him in a position to find out for himself. To tell him is the teacher's fatal line of least resistance. Merely to point the way often involves effort or self-sacrifice. Practice it and practice it again must be our motto.

"As the teacher so the pupils" is nowhere so true as in the matter of cheerfulness. It is so easy to doubt when one is tired from a hard day's work, that often we unconsciously become gloomy and not too agreeable when the children seem restless. A little introspection at such times will frequently show that the teacher's bright, cheerful ways, her smile, her energy and enthusiasm have been replaced by a general attitude of pessimism. Can one ever overcome this? Certainly not without trying. Trying here does not mean merely resolving to put away the gloom if it ever comes again, it means resolution plus "turning the trick" the first chance you have, and then again, and again, till you win.

How can I learn correct dress and manners? Partly by reading, but largely by keeping my eyes open. There are dozens of magazines that deal with dress, and then there are people to look at, and pages of advertising, and shop windows. All there is to be known on the subject is easily available. How do the people of my type and calling dress? How do the best dressed people dress? It is all so very simple that one wonders why so much poor taste is shown. There are books on manners and conversation and correct English, and there are examples of all of them everywhere we go. Read the best novels, essays, and biographies. Such books teem with suggestions and illustrations. One win-

ter's study of these questions along the lines here suggested would be of invaluable service to teachers and indirectly to the schools. How often the girls dress their hair, or pattern their blouses after the fashion set by the teacher! How often they copy their teacher's mannerisms and phrases, and in the fundamentals as well as in these lesser attributes of personality, how often does the teacher set the standard for her whole community! We must cease to regard our education as complete when it has dealt with books alone. What have these books done to make us different men and women personally, is the vital question. These differences must exist not only in the form of ideals and aspirations, but also in the form of specific habits of conduct. If we are really different, then our behavior will be different. Education must indeed be for us organized self-direction.

5. Chapter summary

In summarizing, let us keep in mind the large importance of personality as a part of the teacher's equipment. To be positive rather than negative; to be frank and sincere; to be sympathetic, tactful, and self-sacrificing; and withal to be a thorough believer in the possibilities of life; these are the demands of the schoolroom, and they are the demands of real achievement everywhere.

As we have seen, these qualities express themselves in good breeding; in our personal appearance; in our manners and conversation; in the quality of our English; and in the character and control of our voices. We must remember, too, that these things are not all inherited. The responsibility for their attainment is our very own. Training and self-discipline in the practice of decision; in the development of right ideals and specific habits; in the powers of observation and imitation — these are the specific points of attack for the teacher who would enlarge her own personal power and charm, and through these her professional effectiveness.

QUESTIONS FOR DISCUSSION

1. Define "personality" as you understand the term.
2. Try to analyze and evaluate the personality of some one whom you admire as a man or woman of high character. Try the same plan on yourself and on one of your former teachers.
3. Under the headings used in this chapter for analyzing character, try to set down the qualities you would regard as necessary for an ideal teacher. Set over against each of these a quality or trait of the opposite sort. Where, in respect to these two extremes, do you place yourself as a teacher?
4. Classify a dozen of your friends as positive or negative. Try the same plan on your pupils and yourself.
5. Mention some decisions you have made in the past in school work that put your frankness and sincerity to the test.
6. In what ways have you shown sympathy in your school work?
7. Think of the most tactful person you know. Is he a leader in his work and in his community? In what kinds of situations have you seen him show tact? Think of the most untactful person you know and apply these same inquiries. In what ways do you need to use tact in your work?
8. Who is the greatest optimist you know? Has he many friends? Do many seem to dislike him? Think of the greatest pessimist you know and apply these same questions. Which one seems to get most out of life? Which one seems to contribute most to society? Is there danger of being too optimistic? If so, what is the antidote for it?
9. Do you think Locke overstates the importance of good breeding? Think among your acquaintances of the best-mannered person, the best-dressed person, the best conversationalist, the person who uses the best English, and the one who has the best voice. How many different people did you have to name? Is any one whom you named specially lacking in respect to one or more of the other points?
10. Can you recall the name of any former teacher of yours who was especially strong or especially deficient in any one of these respects? Can you analyze the significance which that quality had in adding to or detracting from that teacher's worth in the classroom and in the community?
11. In what ways have you tried to perfect your own appearance, manners, etc.? Suggest methods for further growth.
12. What specific habits can you mention that you have consciously developed as a result of your desire to make a better appearance, to have better manners, to converse more easily and pleasantly, to perfect your written and spoken English, and to increase the effectiveness of your voice? What habits along these lines are you now trying to perfect?

REFERENCES FOR ADDITIONAL READING

Almack, John, and Lang, Albert. *Problems of the Teaching Profession*, chap. xvi. Boston, Houghton Mifflin Co., 1925.

Bagley, W. G. *Craftsmanship in Teaching*, chap. i. New York, The Macmillan Co., 1911.

Barr, A. S., and Burton, Wm. H. *The Supervision of Teaching*, chap. xiv. New York, D. Appleton & Co., 1926.

Burton, Wm. H. *Supervision and the Improvement of Teaching*, chaps. xv, xvi. New York, D. Appleton & Co., 1923.

Charters, W. W. *The Teaching of Ideals.*

Cubberley, E. P. *The Principal and His School*, chap. ii. Boston, Houghton Mifflin Co., 1923.

Eliot, Chas. W. "The New Definition of the Cultivated Man"; in his *Education for Efficiency.* Boston, Houghton Mifflin Co., 1909.

Hyde, W. DeWitt. *The Teacher's Philosophy.* Boston, Houghton Mifflin Co., 1910.

McKenny, Chas. *The Personality of the Teacher.* Chicago, Roe, Peterson Co., 1910.

Palmer, G. H. *The Ideal Teacher.* Boston, Houghton Mifflin Co., 1910.

CHAPTER XVII

THE TEACHER'S TRAINING AND GROWTH

Outline of Chapter

1. Increased demand for better training: Recent progress — New attitude and demands — Academic training demanded — Professional training demanded — Extent of training required — Training and merit in teaching — Why teachers lose their places — Teacher score cards.
2. The teacher's growth: Necessity for growth — Opportunities for growth — The teacher's reading — Professional meetings, visiting, etc. — Self-appraisement worth while — Progress the only basis of sureness.
3. Summary — Questions — Problems — References.

Something like a definite plan for the training of teachers was first instituted in the United States about three quarters of a century ago. Since that time, through each succeeding decade, the problem of teacher training has gradually become more clearly defined, and has received increased attention and support from the State and from leading educational thinkers. Gradually the public has come to realize that teaching is a difficult and a technical piece of work, requiring special preparation, and the old notion that "teachers are born, not made," has gradually disappeared. As this change has come about, the power to examine and certificate teachers for the schools has been taken out of the hands of local school trustees and placed in the hands of State and county school officials, while the issuance of certificates has been increasingly guarded by State legislation.

1. Increased demand for better training

Recent progress. To-day the demand for carefully trained teachers is felt on every side. One needs only to set down a few facts and figures showing the extent to which facilities for training teachers already exist, and the tend-

ency toward better certification and minimum wage laws, to be convinced that the time is rapidly approaching when the education of teachers will be as carefully and fully specified as is now the education of nurses, physicians, and engineers. Let us consider a few facts.[1]

1. Development of teacher training. There were in the United States, in 1923–24, a total of 382 institutions engaged in the training of teachers. This is an increase of more than 25 per cent since 1900. These institutions were manned by 13,517 instructors, which represents more than a 200 per cent increase since 1900. They enrolled a total of 273,107 students, an increase of 130 per cent since 1900. In 1923 teacher-training institutions graduated 40,484 students, against a total of 11,359 in 1900. The revenue for these schools amounted to $48,948,518 in 1923, as against $5,231,856 in 1900.

To these figures must be added corresponding figures for the more than 300 universities and colleges in which there are schools, departments, or courses devoted to professional training for teachers. It is clear that the number of people making definite professional preparation is increasing far more rapidly than is the number of teaching positions. That is, the teaching force of the country is rapidly increasing its professional preparation.[2]

2. Improving certification requirements. Not only are we increasing training facilities, but the laws governing certification are changing rapidly. In about one third of the

[1] U.S. Bureau of Education Bulletin, 1925, no. 28, on *Statistics of Teachers' Colleges and Normal Schools*, 1923–1924.

[2] Two studies well worth consulting on this problem are: Parkinson, Burney Lynch. *The Professional Preparation and Certification of White Elementary and Secondary Public School Teachers in South Carolina.* University of South Carolina Bulletin, no. 184, 1926.

Buckingham, B. R. *Supply and Demand in Teacher Training.* Ohio University, Bureau of Educational Research Monographs, no. 4, 1926. This study applies to the State of Ohio.

legislatures in session in the year 1915 laws were enacted on this subject, and everywhere the tendency was to do away with the old examination plan in favor of specific professional and academic training requirements.[1] This tendency has not yet stopped, for even where training requirements have supplanted the old method the amounts of training required are being increased from year to year.[2]

More than this, the control of certification is shifting rapidly from local to state authority. Only a very few States are now left in which local control is prominent. In more than half the States there is complete state control, and in many others the State has assumed large power. This means much for the development of a profession of teaching. It means that the effort to get training will be rewarded by the fact that untrained teachers cannot compete for positions. It means more and more that a certificate good in one district will be good in another, and that there will eventually come a liberal reciprocity as between States. In other words, it means that we are building up real standards for the profession.

3. Other evidences. Minimum wage laws and salary schedules, and rules governing appointment and retirement are more and more recognizing training as a basis for determining salary and pension status. In 1925, reports from 215 out of a total of 1371 school systems (city and town) reported that there were either state or local rules requiring that salaries of men and women of equal training and experience and performing similar service shall be equal.[3]

[1] See: Updegraff, H. *Recognition Given College Graduates in the Granting of Teachers' Certificates.* School Review Monograph, no. 4, 1915.

[2] See: Cook, Katherine M. *State Laws and Regulations Governing Teachers' Certificates.* U.S. Bureau of Education Bulletin, no. 22, 1921.

[3] Research Bulletin of the National Education Association, *Public School Salaries in 1924–1925.*

Various other studies show how firm has become the conviction that training is of first importance.

One such inquiry, covering the prevailing opinions and practices of four hundred and twenty superintendents of schools, and one hundred and eighty-three presidents of school boards in the United States, shows that of fifteen factors or qualities considered in the selection of teachers the greatest importance is attached to "scholarship and education."[1] "Discipline (governing skill)" is given second place, "teaching skill or method" holds third place, and "strength of personality" fourth place on their list of fifteen factors.

Thus, if we look at what is going on before our eyes: the almost unheard of expansion of our schools for the professional training of teachers, the increased legal insistence upon training as a prerequisite for certification, the relation of training to the establishment of minimum wage and salary schedules for teachers, and the extent to which superintendents and school boards are basing their appointment of teachers upon training, we must realize that it is a nation-wide movement. Surely no prospective teacher or school administrator can face these plain evidences of the trend of things in education and hope to make an educational career for himself or herself without a careful and extensive preparation in school.

Academic training demanded. There are two sides to the education of a modern teacher — the academic and the professional. The teacher must first of all know something to teach, and secondly she must know how to teach it. The first in general consists of a broad cultural outlook upon

[1] Anderson, W. N., "The Selection of Teachers"; in *Educational Administration and Supervision*, vol. III, p. 83. (February, 1917.) For other interesting data see: Whitney, F. L., *The Growth of Teachers in Service*. New York, The Century Co., 1926.

life, an outlook at once intellectual, æsthetic, moral, and broadly social. While for the most part good books and great teachers will be the chief sources from which such training will be derived, yet there will continue to be increasing value placed upon travel and contact with people from all walks of life as the most important means of supplementing the more systematic training which will be received in the schools.

Such an outlook upon life cannot be acquired by the student who stresses textbook knowledge alone and seeks to cram the memory with isolated facts. The teacher, above all people, must feel the force of the larger currents in civilization, past and present, and be able to see how these are to be influenced by the knowledge and the skills she wishes to impart to her pupils. Mere names and dates in history; mere political forms and formulæ; mere rules in grammar, arithmetic, and spelling, are not enough. These are all essential, but only as the bare skeleton of her real training, which looks to the larger and deeper significance of such facts as they enter into the meaning of the world in which we live.

Professional training demanded. Such a body of knowledge and experience is the only sound basis for the second part of a teacher's education, which is to be professional. Such training consists in being able to view this foundation knowledge and experience, or such parts of it as appear in the course of study to be taught, in their relations to the child and to the social and physical world in which the child lives. The demand is that we shall teach children rather than books, and in order to do this we must know something about the processes by means of which knowledge, skills, appreciation, and ideals are gained by the child, and how they are imparted by the teacher.

But the professional duties of the teacher, and particularly

of the principal and superintendent, are broader than is implied by the term teaching alone. There are the problems of organization and management, the problems of orienting the school with respect to the life of the community, and the problem of selecting and organizing the course of study. These call for an understanding of the school as an institution. What has the school attempted, and what should it now be attempting to do for civilization? What are the principles upon which such an institution and such courses of study may properly be organized? How may these principles be applied to the end that health and physical development will be cared for, and real education of the children result? These are fundamental questions.

First of all we should expect our teacher to possess a general knowledge of the history of education, through which she would come to see the school as one of the several great social enterprises of past and present civilizations. Secondly, we should expect her to know something of the fundamentals of educational psychology and of the principles of teaching, in order that she might exercise economy in her management of the processes of instruction. Third, she should have some knowledge of school organization and management, since these pertain to the real technique of directing the work of the school. Fourth, we should insist further upon some knowledge of school hygiene and health conservation, in order that the physical conditions under which our children work may be conducive to the attainment of other aims of the school. Fifth, these four fields of knowledge must then be carefully coördinated in some actual practice, under wise direction, in order that to her knowledge she may add skill in execution.

Extent of training required. It is not so difficult to state what should ideally be the extent of this training, and certainly every teacher should strive to reach such an ideal

even though we know that the economic laws of supply and demand can be violated here very little more than they can be in business. For a practical working basis it is safe, however, to suggest that every teacher who is worthy of a position should not be content to remain below the average in preparation. The present average cannot be stated with absolute accuracy, but a number of rather extensive investigations [1] furnish us with a fairly safe index. Summarized in a few words these studies practically agree in setting the average mark at approximately four years of high-school training for elementary teachers, and at least the equivalent of full high-school and college training for all teachers in secondary schools.

If this is approximately the average of what is now being accomplished, then no teacher should be satisfied until this point is reached, and even exceeded, for ideally it is too low. For elementary teachers the amount of general or academic training should certainly be the equivalent of a full four years' course in a good high school, and in addition to this at least two years are needed to cover, even in a small way, the five general lines of professional training suggested above. For the high-school teacher the academic training should be increased to include the equivalent of a four years' course in college, and the professional training should include substantial university courses in each of the fields here suggested. That we are actually approaching these standards in practice is evidenced by recent changes in our certification laws, and it is clear that the time is approach-

[1] Those interested in these facts should consult especially: Thorndike, E. L., *The Teaching Staff of Secondary Schools in the United States.* U.S. Bureau of Education, Bulletin no. 404 (1909); Coffman, L. D., *The Social Composition of the Teaching Population,* Teachers College Contributions, no. 41 (1911); Bobbitt, J. F., *The Public Schools of South Bend, Indiana* (Chicago, 1914); and Buckingham, B. R., *Supply and Demand in Teacher Training.*

ing when those who are below this standard will be eliminated from the profession.

Training and merit in teaching. Does training count, and if so how, and to what extent? The facts about individual differences, which we have discussed above,[1] remind us that no two students are alike, and consequently our common observation that teachers of equal training are not equally efficient does not surprise us. Yet we know in general that training counts, and we are concerned here with just why a teacher should spend her time and energy in educating herself to teach.[2]

The brief answer we can give here must be based on two sets of facts which are rapidly accumulating and rapidly making themselves felt in school practice. One of these sets of facts has been gathered by investigations into the practical relationship between training and teaching ability, and the other in connection with the formulation of devices for teacher measurement.

One of the investigations above cited shows that city teachers are better trained than are rural and village teachers. We know also that city teachers are better paid, and that, generally speaking, it is because they can render better service. This does not prove conclusively that the extra training is the cause of the greater efficiency, but such a relationship is strongly suggested. Another study, including the teachers in all the principal high schools of Indiana, states, on the basis of carefully analyzed data, that "the best prepared teachers are the ones who receive the highest salaries." [3]

[1] See Chapter III, section 6.

[2] See: Whitney, F. L. *The Prediction of Teaching Success;* Journal of Educational Research Monograph, no. 6, 1924.

[3] Shideler, S. E., "Qualifications, Salary, and Tenure of the Teachers in the Commissioned High Schools of Indiana"; in *School Review*, vol. XXI, p. 446. (September, 1913.)

Why teachers lose their places. Statistics in regard to a number of teachers dismissed by one hundred and sixteen city superintendents in the United States were collected in a recent investigation, along with a careful analysis of the reasons for dismissal. Among the causes of failures we find "deficiency in scholarship" marked as the chief cause of forty-two of the two hundred and seventy failures, and as the contributory cause of forty more. Other causes, such as "poor methods," "unprofessional attitudes," "lack of interest in work of teaching," and "daily preparation insufficient," all of which pertain to training, stand as the chief cause of sixty-five more failures.[1]

Still another study of scholarship and teaching efficiency, based upon the marks received in teachers' examinations and university and normal-school courses, on the one hand, and city superintendents' estimates of teaching efficiency on the other, points conclusively to the fact that there is a positive relationship between scholarship and teaching efficiency.[2]

These are typical of many more inquiries into the influence which training has upon actual teaching efficiency. It may be true that personal opinion has entered largely into these studies, but the answer to any such criticism is that the facts which they have made use of are just the facts which are actually counting in the appointment, promotion, and dismissal of teachers, and are therefore of very great practical value.

Teacher Score Cards. The second set of facts furnishes a basis for very similar conclusions. There have been a num-

[1] Buellesfield, Henry, "Causes of Failures among Teachers"; in *Educational Administration and Supervision*, vol. I, p. 439. (September, 1915.)

[2] Clapp, F. L., *Scholarship in Relation to Teaching*, in School Review Monograph, no. VI, University of Chicago Press, 1915. See also: Knight, F. B.; *Qualities Connected with Success in Teaching*. New York, Teachers College Contributions to Education, no. 108, 1922.

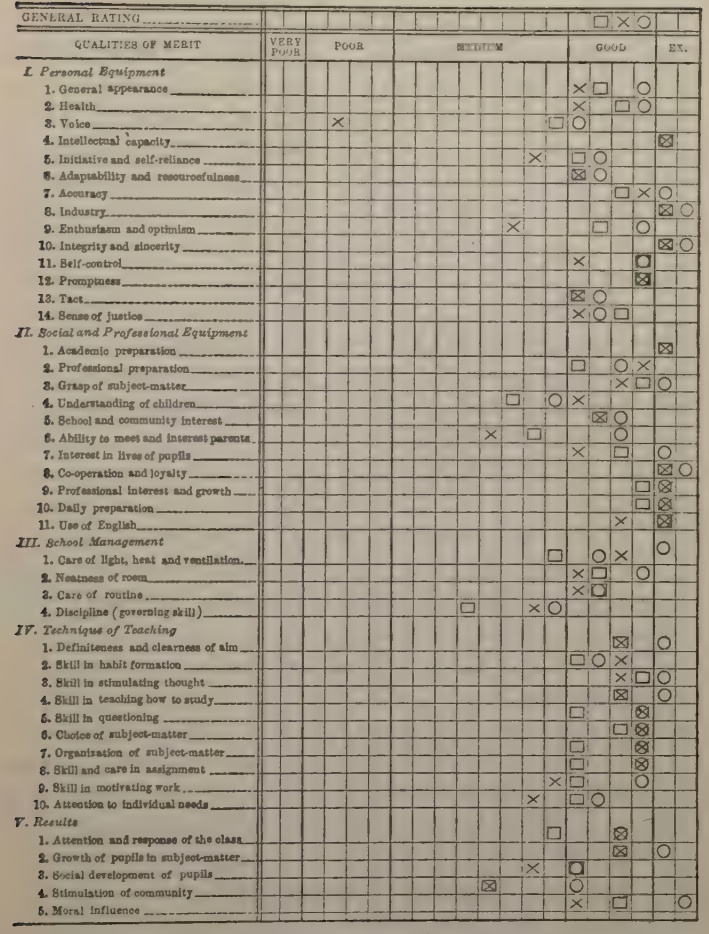

FIG. 7. A TEACHER EFFICIENCY SCORE CARD

Reprinted from Boyce's article, by courtesy of the University of Chicago Press. Efficiency of a teacher recorded by three different judges. Superintendent □; Principal X; Supervisor O.

ber of practical devices made for measuring teaching success, and in every one training, and progressive scholarship, as well as personality, occupy a prominent place. In the earliest of these scales[1] such items as "preparation" — meaning both academic and professional training — "professional attitudes and interest," "continuing preparation," and "increase of professional equipment" indicate the emphasis placed on training. Another similar device makes a complete efficiency record under the five headings: personal equipment, social and professional equipment, school management, technique of teaching, and results.[2] A copy of this score card is given on the opposite page, showing the scoring of one teacher by three judges. Still another somewhat more complex device gives ten out of its total of forty-six points to the various aspects of preparation and growth.[3]

It must be remembered that these devices have been made by careful students of teaching efficiency, and that their aim has been to develop a thoroughly practical scheme by means of which teachers may estimate their own ability in the classroom, as well as have it estimated for them by supervising officers.

All the facts we have been presenting here are hard and practical facts that argue much more forcefully than any mere words of advice can do, and they must not be ignored by anyone who expects to enter school work, or to remain in it long. The time when meager and indifferent preparation will suffice is past, and every progressive teacher should wel-

[1] Elliott, E. C., *Provisional Plan for the Measure of Merit of Teachers.* Wisconsin State Department of Education, 1912.

[2] Boyce, A. C., *A Method for Guiding and Controlling the Judging of Teaching Efficiency.* School Review Monograph, no. VI, University of Chicago Press, 1915.

[3] Witham, Ernest C., "School and Teacher Measurement"; *Journal of Educational Psychology*, vol. V, p. 267. (May, 1914.)

come and help to sustain the tendency toward higher requirements for certification and retention in place.

2. The teacher's growth

Necessity for growth. It is not enough merely to begin with a good education. The constantly changing conditions and functions of the school make it imperative that teachers shall continue to grow[1] in their work. New school aims must be constantly formulating to meet new social, industrial, and political needs; new pedagogical principles must be evolved; new devices in teaching and management must be worked out; and greater skill in executing in these new terms must be attained. The teacher has a part in this changing program. She is not expected to develop many new theories, but she must develop her practice in terms of new theories, and she must increase her own personal power and charm. To do these things she must be constantly on the alert, constantly in training, and constantly progressing. In the calling of teaching there is no such thing as standing still. To cease to be a student when one takes up the work of teaching is to act on the very false assumption that the training of to-day will suffice for the issues of to-morrow.

Opportunities for growth. The teacher's opportunities for growth are almost unlimited in number and variety, and are so easily available that even the teacher in the most isolated rural school has no excuse for failing to keep abreast with her position. There is, first, the social life of the com-

[1] A most interesting account of the numerous opportunities for self-development which are open to teachers is presented in United States Bureau of Education, Bulletin no. 3 (1911), by Wm. Carl Ruediger, entitled *Agencies for the Improvement of Teachers in Service.* An important recent contribution to this problem is: Whitney, F. L., *The Growth of Teachers in Service.* New York, The Century Co., 1926. See also Russell, C., *The Improvement of City-Elementary School Teachers in Service.* New York Teachers College, Columbia University, Contributions to Education, no. 128, 1922.

munity itself, really to participate in which is always a liberal training for the young teacher. There are the public, or perhaps traveling, libraries, with all kinds of good books. There are magazines and papers at a small cost. There are possible extension courses, public lectures, the graphophone, the radio, musicals, and theaters. There are teachers' meetings, institutes, associations, summer schools, reading-circle work, visiting schools, trips to parks and museums, and travel, most of which are available in some degree to all, and to a large degree to most teachers.

Too many teachers act on the assumption that they are being paid for the work they do in the schoolroom alone. This is a wrong notion. The school is an institution of and for all the people, and must function with old as well as with young.[1] Leadership in directing the community interests, since they naturally center in the school, is in part what the teacher is being paid for, and such service cannot be rendered by standing aloof from the people and their social activities. Moreover, even if such a traditional conception were acceptable to the people, it is too narrow a life for any teacher to live. Merely because one becomes a teacher she should not therefore neglect to be a citizen. To be a member of a community is to maintain normal social relationships, without which one not only ceases to grow but tends to become narrow, cynical, and personally unattractive.

The teacher's reading. Teachers, as a rule, do not read enough, and the reading they do is too often not well balanced. Let us sketch out a possible school year's reading to illustrate what is meant. First of all, there must be some balance between the reading one does for general culture and that which is done for professional development. Again, in the general reading there should be some balance between that which deals with current issues and that covering

[1] See Chapter IV, section 2.

matter of a more permanent type; and so on with other groups which the following schemes may clearly illustrate.[1]

SUGGESTED MATERIALS FOR ONE YEAR'S READING

A. General Reading

I. Current literature.
  1. A daily newspaper.
  2. One weekly magazine, such as:
    a. The Independent
    b. The Literary Digest
    c. The New Republic
    d. The Outlook
  3. Two Monthly Magazines, such as:
    a. Scribner's Magazine
    b. Harper's Magazine
    c. The Golden Book
    d. The Review of Reviews
    e. The World's Work

II. Books (at least one book a month).
  1. Fiction, poetry, and drama, such as:
    Scott
    Dickens
    Thackeray
    Victor Hugo
    Balzac
    Dante
    Molière
    Rostand
  2. Old, modern, and recent books, such as:
    Daudet
    De Maupassant
    Chekhov
    Tolstoy

[1] It must be understood that this list is merely suggestive of some of the most suitable and easily available materials which any teacher will find helpful in her own plan of self-education. It is in no way exhaustive at any point, the aim being merely to present a sample program from which any teacher can make selections. It is believed to be suitable in character and amount for any teacher who is willing to do a reasonable amount of systematic work each year. Such a program consistently pursued for a term of years would in itself give a liberal education.

H. G. Wells
James Branch Cabell
Theodore Dreiser
Edna Ferber

3. Biography:
   a. Of some writer or journalist
   b. Of some statesman or scholar
   c. Of some industrial leader
   d. Of some scientist or philosopher
   e. Of some actor
4. Travel, such as:
   a. Sir Francis Younghusband's *Peking to Lhasa*
   b. Joseph H. Apple's *A World Cruise Log*
   c. Harry A. Franck's *East of Siam*
   d. Vilhjalmur Stefansson's *The Friendly Arctic*
5. Science, such as:
   a. Dorsey's, *Why We Behave Like Human Beings*
   b. Slosson's *Creative Chemistry*
   c. Gregory's *The Spirit and Service of Science*
6. History and philosophy, such as:
   a. Mark Sullivan, *Our Times*
   b. Will Durant, *Story of Philosophy*
   c. Claude G. Bowers, *Jefferson & Hamilton*
   d. Foster, *A Century of American Diplomacy*

B. Professional Reading

I. Current literature. The magazines covering:
   1. Educational news (one), such as:
      a. Local state school journal
      b. American Educational Digest
      c. Journal of Education, Boston
      d. The *Journal of the National Educational Association*
      e. School Life
   2. Discussion of practical schoolroom problems (one), such as:
      a. The Journal of Educational Method
      b. Primary Education (*Popular Educator*)
      c. American Childhood
      d. Industrial Arts Magazine

3. Scientific discussions (one), such as:
   a. The Elementary School Journal
   b. Journal of Educational Psychology
   c. Journal of Educational Research

II. Books of general character (two), such as:
1. Kilpatrick, Wm. H., *Education for a Changing Civilization*
2. Cubberley, E. P., *An Introduction to the Study of Education*
3. Bertrand Russell, *Education and the Good Life*
4. Sisson, Edward O., *Educating for Freedom*
5. Bode, Boyd H., *Fundamentals of Education*
6. Almack and Lang, *Problems of the Teaching Profession*
7. Cubberley, E. P., *Public Education in the United States*
8. Chapman, L. C. and Counts, G. S., *Principles of Education*

III. Books on methods and management (two), such as:
1. Kilpatrick, Wm. H., *Foundations of Method*
2. Wilson, Kyte, & Lull, *Modern Methods in Teaching*
3. Thomas, Frank W., *Training for Effective Study*
4. Minor, Ruby, *Principles of Teaching Practically Applied*
5. Davis, S. E., *The Work of the Teacher*
6. Freeland, *Modern Elementary School Practice*
7. Stormzand, Martin J., *Progressive Methods in Teaching*
8. Thomas, Frank W., *Principles and Technique of Teaching*

IV. Books on physical and industrial education (one), such as:
1. Ayres, Williams, and Wood, *Healthful Schools*
2. Proctor, Wm. M., *Vocational Guidance*
3. Averill, Lawrence A., *Educational Hygiene*
4. Terman, L. M., *The Hygiene of the School Child*
5. Snedden, David, *The Problem of Vocational Education*

V. Scientific books (one), such as:
1. McCall, Wm. A., *How to Experiment in Education*
2. Freeman, F. N., *The Psychology of the Common Branches*
3. Trow, Wm. Clark, *Scientific Methods in Education*
4. Kelley, Truman L., *Interpretation of Educational Measurements*
5. Monroe, De Voss, and Kelly, *Educational Tests and Measurements*
6. Sears, Jesse B., *The School Survey*
7. Any of the recent School Survey Reports

One book each month. The teacher's first impression may be that this represents a large undertaking. Aside from current literature, it calls for the reading of four books for general culture, and six for professional development. This is less than two books each month through the school year, leaving the vacation period free for attendance at a summer school, further light reading, recreation, and travel. It is about the minimum amount of reading necessary for the all-round development which we have a right to expect of all public servants. It does not suggest as much current fiction as many people read, but it shows about the proper ratio which fiction should hold to other lines of reading, and if this proportion is adhered to there would be far less reading which amounts to dissipation, and far more that furnishes food for thought. This is not meant to suggest that reading purely for recreation should be in the least neglected.

Professional meetings, visiting, etc. If the teachers of a county were to organize a reading circle on this basis, and meet at intervals for reports and discussion, the results would be invaluable. Such a plan could also be carried out in teachers' meetings with excellent effect. Such reading circles, when properly managed, are among the most potent forces for the personal and professional development of teachers that have yet been devised. Their value lies in the fact that it extends throughout the year, furnishes definite intellectual activity in solitude, provides a basis for real discussion at meetings, and gives the participants a sense of membership in a stable organization and calling.

The teachers' institute is another organization that offers excellent opportunities for solid growth. The tendency here, as in other professional organizations, is for lecturers to present concrete problems and to show what is to be done about them by the teachers. It remains for the teacher to go back to her work and put what she has heard to the

test. This she is at liberty to do or not; many teachers, for lack of energy, do not, and as a consequence tend to lose interest and cease to grow.

There is probably no better way to get concrete suggestions for one's work than by visiting other teachers. Many city superintendents, seeing the value of this, have made visiting a definite part of every teacher's work.

Self-appraisement worth while. There is nothing more stimulating to growth than a consciousness of progress made and of definite things yet to be accomplished. In a practical career one needs at times to look both backward and forward: backward, because this gives the consciousness of having achieved; forward, because the heights ahead lure on to greater effort.

This looking may be casual — in terms of the jobs one has held; or critical — in terms of personal and professional growth. Some profit should be gained from the former; very much more from the latter. Success is not always apparent in the nature of the job one holds, and what appears to be progress in certain kinds of jobs may not be progress that will endure. Solid progress has been made only when there is real evidence of personal and professional growth.

There are two ways of gathering evidence on this subject: first, to review the actual efforts made; second, to note any tangible improvement in one's habits, attitudes, knowledge, skill, and personal qualities. Taking such a personal inventory is an exercise worth while. In reality, if we expect to realize on our efforts to gain culture and professional growth we should regard such a check much as business regards its inventory and audit.

1. The cultural budget and audit. At the beginning of the year the teacher will do well to examine the above reading program and select and arrange her year's reading. At

intervals through the year, and at the end of the year, a careful check should be made of the amount of the work actually done.

Similarly with matters of entertainment, travel, and forms of recreation, all of which look to an expansion of our fitness for work and for living — either with ourselves alone or with our fellows. What is needed to keep us fit is a wide variety of contacts with the current of civilization. Good books, companions, travel, the theater, museum, and art gallery, the business and industrial world, the great out-of-doors, all these are avenues to physical, intellectual, and social fitness which the teacher must keep wide open if she expects to grow and to enjoy her work. To check up at the end of a month or a year will often be a revelation. It is so easy to neglect these things, and with neglect to develop habits of living alone and attitudes of indifference toward the world of people and affairs. With this there soon comes the careworn expression, the overserious, critical, or cynical attitude — and we have the forgotten or disliked "schoolmarm" where we might have had a charming social and intellectual leader.

2. Measuring our achievement. It is not enough, however, to check these external evidences of growth. Not only what have I done to try to grow, but also, what have my efforts resulted in, are questions to be asked. What are some of the things I have learned during the past month or year? What changes have I effected in my dress, language, manners, ability to appreciate art, music, literature, and drama? Where and how have I gained in social facilities? Where have I widened my social contacts and deepened my friendships? Where have I improved my physical condition? And, not the least, to what extent have I had a really delightful time?

To make a mental inventory of tangible achievements on

these and like points is a wholesome exercise. At all these points we need to take note, too, of what we have lost.

There have been devised for this purpose what are known as self-rating cards.[1] These are simple inventory sheets containing many items referring to things a teacher should be or do. It is decidedly worth while to score one's self twice a year by such a plan.

Progress the only basis of sureness. The teacher, as well as the business man, must learn to turn things to account. She must keep up her stock of culture as the merchant keeps up his stock of goods, and, like the merchant, must not overlook the staple lines because there appears to be large profit in temporary and trivial wares. The teacher who reads only sentimental stories and attends only cheap vaudeville programs, is neglecting the staples which are found in the best class of non-fiction as well as fiction, at the opera, the high-class theater, and the lecture hall. Failure is as certain for the lopsided teacher as it is for the lopsided business. Progress along sound lines is the only basis of success. Look at the failures around you. They are people who were not growing. The unprogressive teacher is usually jealous, pessimistic, and in general unhappy, while the progressive teacher is alert, happy, and personally attractive. The one talks about what she is, the other about what she is going to become. The one emphasizes her rights, the other her privileges and obligations. The one works for salary, the other to serve, and the one fails and is forgotten, while the other succeeds, and is loved and honored by all who knew her.

3. Chapter summary

In this chapter we have pointed out the increasing demand for

[1] For a helpful collection of such devices, see *City School Leaflet*, no. 18 (Feb., 1925), U. S. Bureau of Education, by Bertha Y. Hebb.

better trained teachers and the consequent prospect of failure for those who enter the profession with inadequate training, or who fail to keep pace with the growing needs of the school. We have seen that this training must consist of both academic and professional study, not of books alone, but with the view of getting a sound comprehension of, and a broad perspective for, the knowledge the teacher is to impart, and skill in imparting it.

In order to make clear that this is to be a continuous process for the teacher, an outline of a year's program of study has been suggested. The plan calls for a reasonable balance between light and heavy reading. It suggests the breadth of contact which the teacher must keep with affairs and with her profession, and offers specific directions for carrying out such a plan of self-development — a plan which every teacher should make herself follow if she is not able to enter upon it with real pleasure and enthusiasm. Finally, emphasis is placed upon the desirability of the teacher's applying an occasional check on her achievements by the use of one of the personal efficiency rating schemes.

QUESTIONS FOR DISCUSSION

1. Collect the facts for your own State which tend to show that the problem of training teachers is holding a more prominent place in the educational policy of the State now than it held a decade ago.
2. How do you distinguish between academic and professional training?
3. What are the reasons why a more extensive professional training is necessary to-day than was necessary in colonial times?
4. From the facts cited, what seems to be the practical bearing of training on school practice? Does this correspond to your own observations?
5. Have you attempted to evaluate your own teaching or that of another teacher in terms of one of the scales or score cards suggested? What is the advantage of such plans for use by the teacher herself, by the principal, or by the supervisor?
6. If you could take your education over again, in what ways, if any, would you change it, and why? Why is the training of twenty years ago inadequate for a teacher of to-day?
7. Why is it necessary to continue to be a student after entering teaching? Classify your former teachers, and your present acquaintances among teachers, with respect to their efforts to grow in their work.
8. Try to estimate the amount of time you think it would be necessary to devote daily to reading in order to complete the reading program

suggested above in eight months. Would it be a reasonable undertaking? Where would you shorten or supplement it?

9. Without using any of the books or magazines above mentioned, make out a similar program that you would like to carry out.
10. Make out a list of books and articles which you would recommend to a teacher of a beginning class, another for a teacher of the upper grades, another for a teacher of a rural school, another for a teacher of reading, and others for teachers of spelling, arithmetic, language, nature study, civics, and history.
11. Should advancement in salary be based in part on the teacher's effort at self-development? If so, how could a superintendent determine the worth of such effort?

PROBLEMS FOR STUDY

1. Make a list of the next ten persons to whom you are introduced. Set down in a note-book your best judgment of each. State how your judgment was effected by:
   a. The person's voice (quality, pitch, loudness).
   b. The person's dress (quality, colors, tailoring, fit).
   c. The person's manners (modesty, self-possession, leading or following in conversation, subject of conversation, courtesy).
   d. The person's ability (knowledge, skill, taste, executive traits).
2. Prepare a program of reading materials, such as the list given, but using different titles. Make an estimate of the number of hours of reading per week that would be required to carry the program through.
3. Take a teacher-rating form, such as the sample given in this chapter, and score ten teachers whom you know well. Place their scores side by side in detail. Consider how you would justify these scores to an inquirer. At what points is the evidence you offer tangible and measurable? Place your estimate of your own rating by the side of the others. To what extent could you offer tangible evidence that your judgment is fair?
4. Prepare similar scores for the five poorest teachers you know. Try to justify your scores. Does your evidence bear upon general training, professional training, physical traits, social traits, æsthetic traits? Prescribe a course of work and activities for the poorest one of the group, indicating the specific points at which you would expect improvement, and the points at which you believe improvement is impossible even with genuine rational effort.

REFERENCES FOR ADDITIONAL READING

Almack, J. C., and Lang, A. *Problems of the Teaching Profession.* Houghton Mifflin Co., Boston. 1925.

Burton, W. H. *Supervision and the Improvement of Teaching.* New York, D. Appleton & Co., 1923.

Clapp, Frank L., and Risk, Thomas M. *Better Teaching: A Handbook for Teachers and Supervisors.* Silver, Burdett & Co., 1927.

Colgrove, C. P. *The Teacher and the School,* chaps, I, II. New York, Chas. Scribner's Sons, 1910.

Hyde, Wm. DeWitt. *The Teacher's Philosophy,* pt. II. Boston, Houghton Mifflin Co., 1910.

Knight, F. B. *Qualities Related to Success in Elementary School Teaching.* New York, Teachers College, Columbia University, 1922.

Learned, W. S., and Bagley, Wm. C. *The Professional Preparation of Teachers for American Schools.* Bul. no. 14, 1920, Carnegie Foundation for the Advancement of Teaching.

Lewis, E. E. *Personnel Problems of the Teaching Staff.* New York, The Century Co., 1925.

Nanninga, S. P. "Teacher Failures in High School"; in *School and Society.* (Jan. 19, 1924.)

Pillsbury, W. H. "The Buffalo Plan of Teacher Training"; in *Elementary School Journal,* vol. 21, p. 602. (April, 1921.)

Rugg, H. O. "Self-improvement of Teachers Through Self-Rating; A New Scale for Rating Teachers' Efficiency"; in *Elementary School Journal,* vol. 19, p. 670. (May, 1920.)

Rural School Survey of New York State. Ithaca, New York, 1922.

Russell, Charles. *The Improvement of the City Elementary School Teacher in Service.* New York, Teachers College, Columbia University, 1922.

Sears, J. B. "The Measurement of Teaching Efficiency"; in *Journal of Educational Research.* (Sept., 1921.)

Whitney, Frederick L. *The Growth of Teachers in Service.* New York, The Century Co., 1927.

CHAPTER XVIII

THE TEACHER'S HEALTH AND RECREATION

Outline of Chapter

1. Teaching a strenuous occupation — Age distribution of teachers.
2. Status of the teacher's health — Mortality rates — Nervous diseases.
3. Causes of such conditions — Responsibility for the problem — Teachers work in bad light — Heating and ventilation — Other factors.
4. Correction of these evils — Some simple hygienic standards — What the teacher can do.
5. The teacher's recreation — Intelligent living — Systematic living — Kinds of exercise and recreation needed — The teacher's vacation.
6. Summary — Questions — References.

1. Teaching a strenuous occupation

Whatever the teacher's personality may be, however fitly she may be equipped for her work, there is yet the question of how effectively her personality and training are going to function. Teaching is everywhere recognized as a strenuous occupation. The teacher must be forever on the alert, exercising patience, discretion, and decision, under conditions which are often most trying. None but the most rugged in physique is competent to exercise wise and sympathetic leadership under such circumstances without taking serious thought for her own physical and mental well-being.

Age distribution of teachers. The tendency among city superintendents is to insist upon a health certificate, based upon a thorough physical examination, as a part of every application for a teaching position, and to refuse to consider the employment of any candidate who has passed the age of forty-five years. Teaching is in the main an occupation for strong, young people, and more and more it is being insisted that these shall be selected on the basis of physical as well as intellectual fitness. Coffman describes the "typi-

cal American male public school teacher" as being twenty-nine years old, and the "typical American female teacher" as being twenty-four years old;[1] of the more than five thousand teachers dealt with in his study, but twenty-nine had reached their sixtieth birthday. In the city of Cleveland, with more than four thousand teachers, twenty-eight were in this class, and only twenty had taught more than thirty-five years.[2] The State pension systems now in force in this country permit teachers to retire at ages ranging from fifty to sixty-five years, after from twenty to thirty-five years' service.[3] Such facts tend to show that teaching makes a heavy demand upon physical energy, and should remind the beginning teacher of the importance of keeping herself physically up to standard.

2. Status of the teacher's health

Mortality rates. It is not enough, however, merely to remind ourselves that teaching is hard work. We must go further and find out what specific effects such work has upon the health of those who enter it. Is there such a thing as occupational disease among teachers? What is the expected mortality among teachers as compared with other groups of people, and what is the character and extent of morbidity? These are questions which cannot be fully answered for want of adequate vital statistics. A few facts are known, however, and their analysis and interpretation by students of school hygiene hold some surprises for those who think that teachers are an unusually healthy group,

[1] Coffman, L. D., *The Social Composition of the Teaching Population.* Teachers College Contributions, no. 41, 1911.

[2] Jessup, W. A., *The Teaching Staff.* Cleveland Education Survey, 1916.

[3] *State Pension Systems for Public-School Teachers.* U. S. Bureau of Education, Bulletin no. 14, 1916.

and that teaching is, from this point of view, an easy occupation.[1]

It does not appear that the mortality rate among teachers is in general any higher than among other similar groups,[2] but that teachers are specially subject to certain chest, throat, gastric, and nervous complaints seems fairly well established.[3] Most prominent among these diseases are tuberculosis, influenza, and conditions of neurasthenia. In his chapter on "Tuberculosis and the Teacher," Dr. Terman generalizes upon carefully analyzed data for the United States, as follows: (1) There is a "higher mortality for teachers, both male and female, than for persons of the corresponding sex in other occupations. This excess is never less than nineteen per cent, and rises as high as twenty-six per cent. (2) There is a higher mortality for female teachers than for male teachers, the difference between the two being forty-three per cent for white teachers, and thirty-nine per cent for teachers of all races."

Nervous diseases. Equally disturbing figures relating to nervous diseases could be cited, as when Todd states that of the eighty-seven out of three hundred and twenty-seven cases receiving breakdown allowances in London, fifty were due to neurasthenia, fourteen to nervous prostration, six to nervous debility, five to melancholia, five to lunacy, and seven to delusions. On the basis of many such facts, Todd says: "Briefly reviewing the results, neurasthenia and a long train of other nervous diseases seem to stand out as

[1] Terman, L. M., *The Teacher's Health.* Offers the most satisfactory concise treatment of this subject for teachers.

[2] Small, W. S., "The Health of Teachers"; in *Proceedings, American School Hygiene Association,* 1909.

[3] Todd, Walter, "Some Prevalent Diseases Incidental to the Profession of Teaching in Elementary Schools"; in *Proceedings, Second International Congress on School Hygiene* (London, 1907, 1908). See also Terman and Small, above cited.

those which teachers have most to fear throughout the whole course of their service."

These are but samples of data that are now rapidly accumulating and which constantly point to the same conclusion, namely, that while the strain of teaching does not seem to affect longevity in its general total, it does lower it in respect to certain diseases; and that morbidity among teachers along these lines is relatively high.

3. Causes of such conditions

Responsibility for the problem. The question of importance is, what are the causes of these difficulties, and are they remediable. Certainly the teacher who is tired and nervous is not one hundred per cent efficient. She is likely to be discouraged, to show a lack of self-confidence and a lack of initiative, and in the long run to become a burden to herself and to the children she means to serve. If the teaching corps is selected from the physically unfit, as is not infrequently claimed, then laws should enforce restrictions which will prevent weaklings from entering such work. The proper time for such restrictions is when the students are entering the normal and other teacher-training schools, and when they become candidates for positions, and not after they have rendered several years of poor service and worn themselves out.

If the causes of the difficulties are to be found in the unhygienic conditions of work in the classroom, or in an improper distribution of the burdens of instruction, then we must look to boards of education and to administrative and supervisory officers for the remedy. If, on the other hand, they are due to the ignorance or indifference of teachers themselves, then it is the teacher's own problem. The fact seems to be that all these causes are operating.

Teachers work in bad light. Perhaps there is no one con-

dition common to a large percentage of our classrooms that is more often the cause of fidgety children and nervous headaches among teachers than that of bad light. Of the six hundred and sixty classrooms examined in the Salt Lake City survey, only ninety-six were found to be properly lighted.[1] The Portland,[2] Butte,[3] and Cleveland[4] surveys, without using figures, speak in the same general vein, while the Springfield[5] survey says, "Of every ten classrooms in the city, seven have windows at the left and rear, one has them at the right and rear, while only two have them at the left only," where they properly belong. As to the amount of light, these scientific surveys speak in equally condemning words. In Salt Lake City, seventy-seven teachers stated that ill effects had been experienced, and fifteen of these stated that their health had been seriously injured in this way.

Heating and ventilation. From these same reports we learn that in Salt Lake City there were between thirty and forty teachers who were at work in rooms with the suffocating temperature of 74° to 80° Fahrenheit. In Springfield the temperature, found by tests in one hundred and seventy rooms, showed a range of from 58° to 86°, there being twenty-eight rooms with a temperature of 74° or higher, and in no room tested was the humidity above forty-six per cent, though the proper humidity is about fifty per cent. In all these investigations it was found that ventilation is as yet an unsolved problem.

[1] Cubberley, E. P., *School Organization and Administration.* World Book Company, 1916.

[2] Portland, Oregon, *Report of a Survey of the Public School System.* 1913. Reprinted by World Book Company, Yonkers, New York.

[3] Butte, Montana, *Report of a Survey of the School System of Butte.* 1914.

[4] *Cleveland Education Survey.* The Survey Committee of the Cleveland Foundation, Cleveland, Ohio, 1916.

[5] *Survey of the Public Schools of Springfield, Illinois.* Russell Sage Foundation, New York, 1914.

Other factors. Aside from these there are other factors, such as chalk dust and innumerable floating particles of lint, cast-off cuticle, and filth-laden bits from throat and nasal discharges; there are soiled books and papers to be handled, and in too many cases the most miserable provisions for drinking-water and for toilet facilities. In a recent study of rural school sanitation in Porter County, Indiana, it is stated that the water used in seventy-five per cent of the schools was obtained from shallow driven wells, that protection from surface drainage was not satisfactory, and that sanitary drinking fountains were in use in but four of the seventy-five buildings examined.[1] The Salt Lake City survey reports that no school was without the common roller towel, and numerous glaring instances of really dangerous conditions could be cited.

We also hear the frequent complaint that there are too many children to the room. The Springfield survey reports the attendance in forty-two out of one hundred and forty-seven rooms to have ranged from forty to fifty-three pupils, and every one knows that this is fairly typical for other cities. The cold lunch, the frequent burden of night study, the long hours of service in the day without real relaxation, the inefficient janitor service, are other items which add to the dangers and strain of teaching.

In the newer buildings most of these difficulties are being overcome. Artificial lights, new types of window shades, thermostatic control of heat, better systems of ventilation, vacuum cleaning systems, more attention to drinking-water and to toilet facilities, provision for hot-lunch service, teachers' rest rooms, and better equipment of all sorts are replacing many of the older forms which were

[1] *Rural School Sanitation, Including Physical and Mental Status of School Children in Porter County, Indiana.* Treasury Department, U. S. Public Health Service, Bulletin no. 77, June, 1916.

sources of eye strain, throat and nose infection, and sanitary discomforts.

These new facilities are not everywhere available, however. We still have thousands of school buildings in which health conditions are as bad as they were fifty years ago. The real gain we have made is in our knowledge of germ diseases. We know much about these germs: how they live, how they multiply, how they are transmitted; and we know the symptoms of their presence. This is a large advantage, however, only if we make use of it. Sunlight will not rid our room of germs if we do not let it into the room. The towels will not be germ-free unless they are properly sterilized and protected. Fresh air will not give us its benefits if we shut it out of the room. Further, we must remember that not all of the new facilities now provided work automatically. They need care and in some cases they must be operated carefully. This means that the teacher must understand her new responsibilities.

4. Correction of these evils

Where modern facilities are lacking, the teacher must undertake to correct the resulting evils. First, she can live a normal life outside the school, and so increase her resistance to disease; and secondly, she can, in some measure, overcome the difficulties within the school. The former she will accomplish by proper exercise, food, and sleep; the latter by first learning the standards to be attained in light, temperature, and ventilation, and then utilize everything available for bringing her room up to these standards.

Some simple hygienic standards. Teachers should become familiar with every sort of standard that has been developed for the management of school work. Here are a few that bear upon the points under discussion:

1. *Temperature.* The proper temperature for a schoolroom is about 68° Fahrenheit.

2. *Light.* The light on every desk should be at least nine foot candle-power. Or the window glass space should equal twenty to twenty-five per cent of the floor space in the room.
3. *Humidity.* The proper humidity is about fifty per cent (one hundred per cent is the point at which precipitation begins).
4. *Air Space.* The amount of pure air per person in the room should be not less than 2000 cubic feet per hour.
5. *Contagious diseases.* Any child who is considered in the least dangerous to others from the standpoint of contagious or infectious disease should be sent home promptly.[1]
6. *Other general rules* to be followed are: light from left side only, and no glaring sunlight on desks; no roller towels or common drinking cup; air in room should be kept in motion; windows and floor should be washed frequently, and chalk trays and erasers should be cleaned daily.

What the teacher can do. These are very simple rules to learn, and most of them can be followed in some measure at least. If the teacher cannot control the temperature of her room directly, then she should present the facts in the case to her principal, superintendent, or school board, and urge that it have prompt attention. In the matter of light, most teachers need to be reminded that window shades are made to use. Without an instrument only serious errors in humidity are likely to be detected, but the right amount of breathing-space is easily figured and should be insisted upon. The roller towel and other germ-carrying devices will likewise disappear from the schoolroom much sooner if the teacher will insist upon her right to protect her own health and the health of her pupils.

As to dangers from infected children, books, and papers, the teacher must learn such discretion as is commonly exercised by all practicing nurses. Some slight knowledge of how to detect symptoms of infectious diseases, and prompt

[1] Every teacher should be familiar with such books as *The Hygiene of the School Child*, by Dr. L. M. Terman; *The Health Index of Children*, by Dr. E. B. Hoag; and *The Health of the School Child*, by W. Leslie Mackenzie.

handling of suspected cases, will cover most of the dangers from such sources, while a simple plan for disinfecting books is easily operated.

5. The teachers' recreation

Intelligent living. As a matter of self-protection, to say nothing of the wisdom of living a joyous life, the teacher must look to the problem of keeping an adequate margin of good health. This is largely the problem of proper rest and recreation. It is such a simple truth to say that when one is tired and half sick almost any sort of work becomes barren drudgery, and yet this explanation is rarely thought of by the teacher who retires in disgust after a long evening spent in the task of correcting papers.

If every teacher would figure up at frequent intervals the approximate amount of her time that has gone into work directly and indirectly connected with her profession; into reading and study for general information and culture; into real recreation; and into eating and sleeping she would be able to say whether or not she is maintaining a proper balance among these important interests. Upon this balance depends her margin of security in health, the extent of her efficiency in service, and the fullness of her cup of joy in life.

Systematic living. What is needed by teachers is the application of a bit of system and common sense in their daily lives. Teaching cannot be sedulously followed by young people unless they will studiously offset its inactivity with outside exercise and pleasure. Every teacher should set aside a definite time for exercise, and a definite sum of money for recreation and pleasure. A regular time for a walk, a tennis game, a horseback ride, and a regular monthly allowance for theater, opera, travel, or for the entertaining of one's friends, will take one out into the open air where

acquaintance with nature may be renewed, furnish a host of new thrills, and establish new interests and new companionships which will drive away care, renew the mental and physical vigor, and provide a saner perspective for the serious tasks of the days to come.

Kinds of exercise and recreation needed. In the main the teacher should take her exercise out of doors, and as often as possible the element of play should enter into it strongly. It is not only a matter of exercising muscles, lungs, and circulatory system, but of driving away fatigue of mind as well. Few bright, new ideas are likely to flash into the mind while one is pulling weights or swinging dumbbells in a bedroom or a gymnasium. In order to rest, one must have mental as well as physical diversion, and this does not come except in the presence of new and interesting mental problems. Fishing, hunting, ball, tennis, riding, swimming, skating, coasting, boating, and walking, are sports for people of the quiet life, for such activities re-create the mind as well as the body.

To a goodly amount of such activities, taken frequently and regularly, the teacher should add a certain amount of light reading and frequent attendance at theater or light opera, all for the sake of pure enjoyment and relaxation. A hearty laugh is of inestimable value. Perhaps the most pathetic-looking person the writer ever saw was a man who had taken no vacation and little or no recreation for ten years. In the midst of the most sparkling wit, at a mountain resort, where he had reluctantly gone for rest, he sat with a drawn face and a far-off look as if he could not understand why people were laughing. One rarely faces an audience of teachers that does not contain such faces as this. Teachers need to laugh, they need to see new faces, to hear new voices, to converse with new people about new and different things, for then they can go back to serious work with a

clearer sense of values, which is exactly what rest and recreation bring.

The teacher's vacation. How shall I spend my two to four months' vacation is an annual question for every teacher. Certainly a part of it must be used for recreation, and the remainder for a different kind of work. How it will be divided will depend upon how wisely or foolishly the year has been spent, but for nine teachers out of every ten the following prescription would be a good beginning: First, procure a copy of some such book as Woods Hutchinson's *Exercise and Health*, or Fisher and Fisk's *How to Live*, and then go to a quiet place out of doors and walk, read, eat, and sleep for two or three days, till the books are finished. After this, the average teacher will have lost respect for the person who abuses his or her health, and the remainder of her vacation, so far as rest and exercise are concerned, will take care of itself.

"The only really healthy and natural state of man or woman," says Hutchinson, "is neither sitting, nor standing, nor lying down, but on the run." It is change from too much sitting and standing, from an indoor to an outdoor world, and from a narrow to a broad social life, that is needed, and some part of the vacation should be devoted exclusively to these purposes. Rest comes quite as much, however, from change of work as it does from stopping work altogether. A certain amount of reading, some travel, and attendance at summer school ought easily to find place in every teacher's vacation. These recreations will add variety and furnish the mind with fresh ideas that will keep dull care away throughout the long months later on of shut-in life at school. Such a vacation puts one into a new world, no less busy than the old one, but fresh and charming as the spring — it sends us back to our tasks with new stores of energy.

6. Chapter summary

Summarizing, let us recall first, the facts which show plainly that teaching is an occupation which lays a heavy tax upon physical strength, and second the natural tendency of teachers to treat these facts as if they did not exist.

This chapter has not only pointed out the causes of these hard conditions — such as bad light, poor heating, bad ventilation, lack of cleanliness, lack of toilet and other facilities — but has also pointed clearly to their possible elimination. The remedy rests largely with the teacher. First, she must know the simple hygienic standards, and how and where to apply them; and second, she must insist upon their constant use in her work.

To keep physically fit the teacher must have recreation, and we have urged the importance of taking this matter seriously and upon living a sane and wholesome life in which work and play are properly balanced against each other. Real recreation is not to be confused with ordinary gymnastics, where only the body is exercised, since with the teacher the need is quite as much for a new set of mental pictures as it is for physical rest.

QUESTIONS FOR DISCUSSION

1. What in your own experience would lead you to consider teaching a trying occupation?
2. How many teachers have you known who are past fifty-five years old? Were they rendering as good service as younger teachers? Were they showing their age more than people in other callings?
3. Have you observed that teachers frequently have throat, nose, and eye troubles? Are teachers' voices less soft and pleasing than you are accustomed to hearing on the street and in the store?
4. In schools where you have taught or studied, what conditions do you recall that were injurious to the teacher's health?
5. Apply to a dozen schoolrooms the set of standards here presented. What are the results?
6. What laws in your State are designed to protect the health of the teacher and pupils? Do you know of any State having laws that are better in these respects?
7. Make out a list of books and magazines which you could recommend to teachers for vacation reading. What subjects in general do they cover?
8. What percentage of your waking time during the past week have you devoted to exercise and recreation? How does this compare with other weeks? What kinds of exercise were included?

9. What have you read in the past month that afforded you real mental relaxation?
10. Make out an ideal plan for your coming vacation. What would it cost to carry out the plan? Make out a plan that your salary would warrant your carrying out.
11. What percentage of your salary this year has been spent for recreation and self-development, including reading matter, travel, entertainment? Is that a reasonable allowance?

REFERENCES FOR ADDITIONAL READING

Allen, Wm. H. *Civics and Health.* Boston, Ginn & Co., 1909.

Almack, John C., and Lang, Albert R. *Problems of the Teaching Profession,* chap. xv. Boston, Houghton Mifflin Co., 1925.

Chancellor, Wm. E. *The Health of the Teacher.* Chicago, Forbes & Co., 1919.

Curtis, Henry S. *Recreation for Teachers.* New York, The Macmillan Co., 1918.

Dublin, Louis I. "Physical Disability of New York City School Teachers"; in *School and Society,* vol. 4. (Oct. 7, 14, 1916.)

Fisher & Fisk. *How to Live.* New York, Funk & Wagnalls, 1915.

Hart, J. Y. "An Investigation of Sickness — Data of Elementary School Teachers in London, 1904–1919," in *Journal of the Royal Statistical Society,* vol. 85, part III, p. 349. (May, 1922.)

Hoag, Ernest B., and Terman, L. M. *Health Work in the Schools,* chap. XVII. Boston, Houghton Mifflin Co., 1914.

Hutchinson, Woods. *Exercise and Health,* chaps. I, II, VI. New York, Outing Pub. Co., 1911.

Lewis, E. E. *Personnel Problems of the Teaching Staff,* chap. XX. New York, The Century Co., 1925.

McCurdy, J. H. "Personal Health Problems for Teachers"; *American Physical Education Review,* vol. 26, p. 376. (Nov., 1921.)

Patrick, S. T. W. *The Psychology of Relaxation.* Boston, Houghton Mifflin Co., 1916.

Story, T. A. "Health Habits of Teachers"; in *Journal of New York Teachers Association.* (Feb., 1919.)

Terman, L. M. *The Teacher's Health.* Boston, Houghton Mifflin Co., 1913.

U.S. Bureau of Education. *Health Training for Teachers.* Bul. no. 8, 1920.

CHAPTER XIX

THE TEACHER AND SUPERVISION

Outline of Chapter

1. The nature of supervision: Supervision defined — The need for supervision — The persons affected — The machinery of supervision — Other factors involved — The teacher's place in supervision.
2. The problems of supervision: The main groups of problems — The meaning of curriculum — Making and revising courses of study — Interpreting the course of study — Giving instruction — Managing the children — Administration responsibilities.
3. The methods of supervision: Emphasis on duties rather than rights — Teachers' meetings — Group conferences — Reading-circle work — Demonstration teaching — Visiting other teachers — Individual conferences — The use of exhibits — Experiment and investigation.
4. Measuring teaching efficiency: Being judged — Who should rate the teacher — How may ratings be made.
5. Chapter summary — Questions — Problems — References.

1. The nature of supervision

Supervision defined. Supervision is the practice or the art of assisting the teacher in the management and instruction of children. Although the term is generally applied more exclusively to strictly instructional rather than to managerial service, the distinction here is not of great importance, since in this book management is to so large an extent treated as instruction. As an art, supervision must be based as far as possible upon a science.

This, however, is but an abstract statement, the true meaning of which appears only when we describe the situation in which supervision is carried out. To understand supervision we must see its purpose, or the need that calls it into existence, and we must see the conditions under which it operates, and precisely how it operates.

The need for supervision. The purposes of supervision are to be found in the actual need that exists for two important types of service: first, helping the teacher with her

work; and second, coördinating the work of the many teachers and schools of a system. If it were left to the teacher to define her own need, or to state roughly when and where such need exists, there would in many instances be no supervision at all. This may be due to either of two facts. The teacher with little training and less experience often does not know that her work is poor, or where or why it is poor. Again, some teachers seem to resent supervision as an interference with their work. The former is a case where the teacher needs help, but is quite unconscious of her need; the latter is a case where, however conscious the teacher may be of her need, she believes that supervision is interference and not intended as genuine help.

There is, however, a third type of teacher — one who studies her work, who finds her own weaknesses, and who earnestly seeks help from all sources. For such a teacher, supervision is a recognized need.

To illustrate: Teacher 1, knowing little of the significance of individual differences in instruction, may be quite unconscious of the loss that a very bright child is suffering because his work is so easy, or she may fail to see that by changing a child's seat she will be able to get independent effort from several pupils who are quite behind their class. Teacher 2 fears to have her work inspected. She is conceited, she is willing to hide her mistake, and she is apt to use coercive measures where her instructional skill is weak. She requires John to get his work or stay after hours. She sends work home, and with it, a note that John is failing. The purpose is to unload her own proper responsibilities on the parents. Teacher 3 asks for a conference with the supervisor. She explains her problem, and then asks questions until she understands what to do and how to do it.

The need for coördination of the work of instruction, as between teachers and schools and courses, is equally obvious.

Grade six will mean nothing unless it has reference to a body of subject-matter that is the same in general (not necessarily in detail) for all sixth-grade classes, and unless there is a common standard of achievement for all who enter and are promoted from this grade. Similarly, the border line between grades and between types of schools, as elementary and junior high schools, for example, must be kept in order. Too often there is a "no-man's-land," of both content and method, in which a child is lost as he passes into high school. These lines must be kept closed, and it is a function of supervision to keep them so.

In these illustrations we have a picture of the need for teaching and coördinating assistance. Somehow the profession must rid itself of these types of ignorance and prejudice, and it must stimulate and reward the teacher who coöperates and strives to improve her work.

Growing complexity of school work. In a one-room rural school the school machinery consists of a board of trustees and a teacher. In a large city on the contrary, the school machinery consists of a board of education, a superintendent of schools, several assistant or deputy superintendents, supervisors, research and attendance officers, principals, regular teachers, special teachers, and visiting teachers and nurses, not to mention a complex staff of officers devoted to the development, maintenance, and operation of the school plant. The city system is only the little school grown large, and the added machinery is designed to maintain the unity of purpose and the intimate touch with the child that are so easy to maintain in the little school.

With the development of large schools some specialization has been necessary and, in consequence, the teacher's functions have been modified. In a sense, much of her old independence is gone, and she is now a part of a complex system. She has yielded certain responsibilities to others. In doing

this, however, she has found the opportunity to become a specialist in dealing with children.

While specialization and division of labor are in every way desirable, yet we must remember that our labors can never be divided without someone's keeping close watch over the line of division. Division must not mean separation in a full sense. All the offices in the school machinery exist for a purpose — the instruction of children. Accordingly they must work together to this end, each performing some part of the task, a task that has grown complex not only because of the great numbers of children, but also because of the wide diversity in their educational needs, and because of the new problems created by our modern civilization.

Where coördination is needed. Coördination of the efforts of so many cannot be effected by good intentions alone. Instead, several kinds of effort will be required.

First, there is the problem of seeing to it that educational facilities are provided for all parts of the city, and that the efforts of local neighborhoods do not conflict. It is very easy for this to happen if central control and coördination is lacking. This is a direct responsibility of the superintendent's office.

Second, there must be some standardization of instruction, so that when a pupil moves from one locality to another he will find his place without loss of time. This can be done only if there is definite order in curricula, in standards of achievement, and in grading and promotional machinery. The development of such standards is the joint work of several people, but keeping the schools and the classes all working in conformity with accepted materials and norms is clearly the work of an officer whose duty it is to coördinate the actual work of instruction. This is the function of the supervisors.

Third, within the school there must be order as between

classes. There is joint use by many classes of corridors, library, special rooms, playgrounds, and cafeteria, and so administrative as well as instructional adjustments must be made. These are the special duties of the principal, who is also in part a supervisor.

There are many other points at which specialized machinery must be set up to effect coördination. The problem of the control of attendance; the care of health and of physical and social development; and the matter of records and reports as to attendance, progress in work, and health conditions all must be centralized in order that the machinery of control and management may support the plan of instruction. Hence we have attendance departments, health clinics, nurses, playground directors, and clerical helpers.

The machinery of supervision. Here we are especially concerned with the teacher's contacts with those who are to supervise her work on instruction. This means the principal, and such general and special supervisors as may be placed in charge of her work.

Fig. 8 gives us a chart of this machinery, and shows the lines of cleavage between the several functions. These lines are very clear in the chart, but in practice they are often less clear, and the result is not merely a conflict in authority, but a real lack of coördinated effort with its consequent waste and unhappiness.

To define the actual locus of authority in this picture we would say:

1. All authority rests with the State.
2. The board of education stands as the State's authority to act, within limits of constitution and statute.
3. The superintendent is the executive head of the board. The board delegates executive but not legislative authority to the superintendent.
4. The superintendent delegates responsibility for:
   a. Business management to the business manager.

b. Supervision of instruction to an assistant superintendent, or to supervisors and principals.
c. Administration of each separate school to its principal.
d. Care of health to the medical supervisor.
e. Physical education program to the physical training supervisor.
f. Control of attendance to the attendance supervisor.
g. Research and guidance to the supervisor of those functions.

There must be definite placement of authority in such a machine. This is indicated by solid lines. It will be noticed that supervision is administered by an assistant superintendent of schools. This officer has control over curricula and standards of instruction, and in these matters he is final authority, though responsible to the superintendent.

Other factors involved. In addition to persons, there are other features of the school machine with respect to which the teacher must carry on her work. The curriculum, the grading and promotional scheme, and the marking system are three important unifying instruments in a school system with reference to which all instruction must be conducted. The teacher must understand, at the outset, that she must know these instruments perfectly; she must not only know them as rules of procedure and as content to be taught, but she must understand just how they are to be applied in her room.

These are not machines that destroy the individuality of the teacher; on the contrary they leave wide room for a selection of ways and means. They have been developed out of long experience, and they represent standards that are known to be attainable. The curriculum is at most only a bare skeleton. The promotional scheme is only a set of mileposts along the curriculum road, with rules for the direction of the traveler. The marking system is merely an

exact language for defining success and failure. As instruments of order they are indispensable, and the work of the teacher must be kept in line with them.

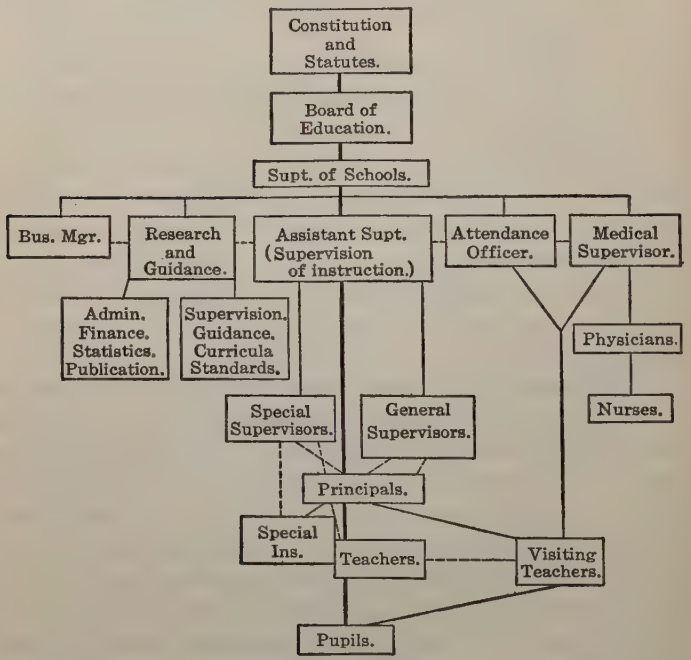

FIG. 8. MACHINERY NECESSARY TO THE SUPERVISION OF INSTRUCTION

This is intended to show the machinery of supervision and how this machinery is related to other parts of the total school organization.

Solid lines mean that the one above is in authority over the one below.

Dotted lines mean that coördination and coöperation are necessary.

The teacher's place in supervision. With this brief analysis let us repeat: Supervision is the very complex function of improving instruction and of keeping the instructional work of a system coördinated. It is made necessary in part by the development of large systems of schools, in part by the desirability of having system in our work, and in part by

the fact that teachers desire to continue their training while in service.

Since the need for this service comes in part from without and in part from within the classroom, and since it must end in better instruction, it is clear that the teacher is a central figure in the situation. Real help cannot be imposed from without; if it were, it would end in a set of standards enforced by inspection and penalties. To make it more than this the teacher must be an active partner in the performance of the function. She must, so far as is possible, find and define her own needs and be a responsible learner. She must understand the standards and norms to which her work is to conform, and she must assist the supervisor in keeping it adjusted to those norms.

Let us view the function, then, as the conscious and united efforts of a group of people, including teacher, general and special supervisors, and principal, jointly responsible for improving and coördinating the instructional service of the schools. In this view we must remember that supervision is a coöperative enterprise for the success of which the teacher, as well as the supervisor, is actively responsible. The *need* for the service must be sought out as much, or possibly more, by the teacher than by the supervisor. Supervision will be greatly improved only if teachers seek definite help in their work, and teachers alone can prevent supervisors from acting as mere inspectors, or as lecturers carrying coals to Newcastle.

Our further interest here will be to examine the chief types of supervisory service, and to show how the teacher must coöperate, sometimes by leading the way, and again by following the lead of others, but always with the direct or indirect purpose of bettering instruction, always in the spirit of coöperation, and always in the light of the results of scientific study.

2. The problems of supervision

The main groups of problems. It is the purpose here to view supervision from the standpoint of the main problems faced by the teacher at work. These problems may be classified in several ways, though the following classification will be serviceable here:

1. Problems in revising and interpreting courses of study
2. Problems in managing children
3. Problems in giving instruction
4. Problems in coördinating instruction and management with the work of other teachers
5. Problems of an administrative and clerical nature

These problems overlap somewhat, but each is a point of contact between the teacher and her supervisor and administrator. About these points the teacher's responsibilities cluster, and it is in respect to these that the teacher will need to think of improving her usefulness by perfecting her own knowledge, skill, and personality. Every teacher will do well, therefore, to consider carefully what part she is to play in the solution of each of these groups of problems.

The course of study, group 1 above, in most schools is made and ready for use when the teacher begins work, yet a good course of study is always changing, and here the teacher has a responsibility, along with her principal, her supervisors, and her fellow teachers. Making and revising curricula is a joint enterprise.

Group 2 is largely the work of the teacher while the pupils are in her room, but out of the room this work is a joint responsibility shared by principal, teachers, nurse, playground supervisor, and to some extent by the janitor.

Group 3 is the responsibility of the teacher, but always with assistance from supervisors. The same is true of group 4, while for group 5 the teacher is largely responsible to the principal.

The meaning of curriculum. Chapter XI of this book is devoted to the curriculum. There the meaning of a curriculum was developed, and an attempt was made to show how the word subject-matter is to be interpreted. From that discussion it was clear that courses of study and textbooks are but starting points from which the teacher leads the pupil out into the world of people and things. Each study is a separate path, as it were, leading outward from the child's narrow world. It matters much where the path leads and how, yet single, separate paths do not make the contact with the world complete. Each path must be part of a system of paths which together so fully cover the territory round about that the child knows all the ground. This means that these paths are not only to lead to the world outside, but must also lead to one another. That is what makes courses of study into curricula.

Making and revising courses of study. If this conception of the curriculum is ever realized in any school system it will be because it has been developed by those who are to administer, supervise, and teach it. Such a curriculum cannot be factory-made, or in any sense handed down from above. To make and to keep it alive will require the continuous effort of the entire educational staff. The superintendent must set forth the general purposes of instruction around which buildings are erected, teachers employed, supervision organized, and curricula constructed. Back of this statement of purpose is his study of his community and its educational needs.

When the broad policy has been prepared by the superintendent, its interpretation by his subordinates begins. The staff of supervisors and teachers must develop courses of study that express the general theory and policy. To do this well will call for the joint effort of those who can bring to the work the point of view of the broad principles as they

apply in the system as a whole (city, or county, or township); the point of view of those who are to bear the direct responsibility for its administration; and the point of view of the one who knows the children intimately. This means supervisors, principals, and teachers, and it applies equally whether the task is to make new courses or to revise old ones.

Curriculum-making a joint enterprise. The details of making and revising courses of study cannot be treated adequately in less space than a volume. The purpose here is to note, first, that this is a continuous task in which the teacher has a definite responsibility and as definite an opportunity. As a member of committees in conferences with others, the teacher brings her viewpoint to the work of collecting and organizing or reorganizing the materials of the various courses. Here she has her opportunity to get the larger community view of the work, to get an explanation of the points of contact between her own work and that of her colleagues, to make clear the support her own teaching needs from other courses, to analyze and clear up her objections to the textbooks she must use, to enlarge her own grasp of the question of utilizing outside materials through projects, and in general to make the courses her very own courses.

All this work of the teacher must be emphasized both as duty owed to the system and as opportunity to serve and to enlarge her own interests in her work and her grasp of it. Further, if her principal, supervisor, and superintendent are of the old-fashioned dictatorial type, then she is entitled to urge these contributions as her proper professional right as well as duty.

Interpreting the course of study. In the development of courses of study the teacher will find opportunity to clear up the meaning of many troublesome points in the content and the arrangement of both courses and textbooks. Even so, in the day's work there arise many detailed problems of ad-

justment. Here she will find need for her supervisor. In some cases, and for certain classes, it may be wise to depart from the regular outline or the text as arranged. This need may be suggested by the supervisor or the principal, or the teacher may wish to propose it. In any case she will need to determine precisely what the change is for, precisely how to make it, precisely what new or different materials will be required and how to obtain them, and how the change will affect the other parts of the course, the time schedule, and the courses to which her own course contributes. These matters will be the proper subject of personal and group conferences. If it is the teacher's proposal, then she must ask for the conference and be prepared to set forth her suggestions in concrete terms, and to support them with sound theory. If the proposal comes from others she must become a responsible follower, sympathetic and coöperative but at the same time critical, just as she would be critical of any proposals she herself would make, or just as she would wish others to be critical of them.

Giving instruction. In the matter of giving instruction the teacher finds her most intimate contact with her supervisor. In the main this is a question of teaching method, and for that reason its fuller treatment does not belong in this book. It has been shown, however, that management also is essentially a problem of giving instruction, and so not widely different in either purpose or method from giving instruction in the usual sense. Teaching arithmetic is merely managing children's minds in a given type of experience. It requires attention to materials (subject-matter, supplies, and equipment); to present and past types of experience of the children in which number or quantity was a factor; and to the present physical and mental attitudes and conditions of the pupils. The teacher teaches by managing all these factors in the situation.

Let us assume that the teacher has a class in which observation and tests have brought out the facts that the pupils vary widely in ability to comprehend what they read, in rate of reading, in interest in reading, and in types of reading materials they can handle. The teacher asks her supervisor to visit her class. In doing so she explains the above facts about the class, and what she knows and does not know in regard to what to do. The plan of the recitation is explained in advance, and the supervisor knows then just what to watch for. After the visit a conference is held and the recitation is gone over in detail. The supervisor may point out two types of difficulties — one having to do with the children, the other with the teacher. The teacher supplements wherever she can, and then a program of "what to do" is worked out.

Perhaps the children will be divided into homogeneous groups, and assignments fitted to each group. This will be a departure from the regular course of study, perhaps, but designed for a purpose. Aims and materials and methods will be gone over carefully, and arrangements will be made for the supervisor to demonstrate the class procedure. After this demonstration another conference takes up the teacher's own weak points. These are carefully analyzed. Both she and the supervisor are frank, kind, and sympathetic. The outcome for the teacher is almost sure to be a larger grasp of her problem, an increased confidence that she can meet it, and genuine happiness over earnest effort and good results.

Managing the children. If discipline and punishment are but types of instruction, as previous chapters have explained them to be, then the supervisor and the principal may properly concern themselves with problems of controlling and directing the children while in and out of class.

It is in this feature of a teacher's work that we find opportunity to provide the child with occasion to put precepts

into practice in conduct. Self-reliance, dependability, and a sense of responsibility to the group call for promptness, politeness, honesty, respect for the rights of others, neatness, and social and personal qualities that combine to make the good citizen.

Developing a real sense of membership in the school group is, as elsewhere explained, one of the very most important responsibilities and opportunities that the school has. Acquiring that sense of membership is also one of the most difficult things a child has to learn. During recitation time the child is held in a somewhat formal way to a responsible place in the group; at best he is under some compulsion to act in accord with others. From this he learns much, to be sure. But on the playground or in the corridor he is more or less free to act as he pleases. He is held to right social standards there largely by force of his own preference or by public opinion.

The teacher's task of building up a body of public opinion, and of establishing social standards and norms of behavior are more difficult tasks by far than teaching any subject can be. The teacher who attacks this problem seriously as a teaching problem will have much need for advice and council from her principal and supervisor. This is not merely a task of building up a set of techniques for controlling the movements of children. It is far more than that. All those regular procedures of entering and leaving, of collecting papers and supplies, of standing, sitting, and walking, of reciting, and of getting permission or excuse, are but the external mechanism of this society. The person and the motive behind these procedures is what counts. This machinery must not run the children; it must provide the simple, normal, and comfortable modes of behavior, or manner of expression.

In this type of instruction each child is a special problem.

Stubbornness, selfishness, bad manners, ignorance, poor taste, awkwardness, slovenliness, bashfulness, conceit, and timidity, as well as a wide range of opposite qualities and traits, will be found in every classroom and in every school group. How to make a unified working society of this mixture of individualism, one where each child is sensitive to his group privileges and duties and where children learn to prefer to live up to proper social norms, is the problem.

To accomplish this the teacher will study cases, and with the results of these studies will go into conference with the staff of the school, headed by the principal, where these cases will be examined and plans laid for overcoming her difficulties. The teacher here has large responsibility. She alone can know her pupils intimately and report the inner workings of their minds. Others may see their behavior, but she will know what is back of that behavior in the form of wrong motive, bad training, or ill health. Together, and only together, can the staff of the school set all the right forces to work in accord with a plan that is designed to make the school a real society of which each pupil is a conscious and contented and participating member.

Administration responsibilities. Many of the problems above suggested are in a manner administrative in character. There is no sharp line that marks a division between administrative and supervisory duties, or between teaching and administering in a school system. The administrative machine supports all processes — supervisory, managerial, and instructional — and the teacher should understand her responsible contacts with this machine and in proper measure participate in its operation.

Constructing curricula, devising uniform marking and grading systems, classifying and promoting children, making out records and reports, managing such school projects as require preparation in the way of getting equipment, and

conferring with business or social groups outside the school are illustrations of activities in which the teacher has a place in the processes of administering the school. In these contacts she will find opportunity to enlarge the scope of her service and to broaden her social as well as her professional horizon.

3. The methods of supervision

Emphasis on duties rather than rights. As noted above, supervision is a function in which the teacher has a positive and a responsible part. Even though she may be administratively subordinate to her supervisor and principal, yet she must remember that where her supervisors in office have rights they also have responsibilities. Also, she must remember that subordinates are most useful when they are willing to assume responsibilities, when they are willing to think, and when they are frank enough to express an honest difference of opinion or to offer a suggestion to supplement proposals of superiors. In this the teacher must learn to stand on her own feet — not in order to defend her rights (unless they need to be defended), but rather in order to do her full duty as a contributing partner in the supervision-instruction enterprise.

Teachers' Meetings. How can I make my teachers' meetings worth while? This is a question which every live principal asks himself. It cannot be done if these meetings lack a definite purpose or program; if at them the principal lectures his teachers as he would a group of erring children; if they are the place where everyone feels called upon to offer complaints, or if they are the place where announcements and cautions and reminders hold the right of way. The meetings can be successful if all come with the idea of contributing. Teachers destroy the value of meetings, almost as often as do principals, by their worried looks, their

inattention, their tardiness, their seeming indifference, their haste to get away, and their too much talk and argument. In properly conducted teachers' meetings alone can some of the things which are above suggested be accomplished. The teacher must go to learn and to help others to learn. The field to be covered by the meetings is as wide as the school.

Section 2 above is a basis for suggestions as to types of subjects and purposes. When the purpose of the meeting is announced the teacher should at once begin to consider how she can contribute, and what she may reasonably expect to gain from the meeting. Let us say a meeting is called to discuss the results of a series of tests given throughout the school. At once the teacher will make a list of the questions which she would like answered. Why did John score so high? He is no student at all, often absent, and more or less indifferent. Why is her class so varied? Why is it on the average above or below the norm? These and many questions she should think over. Having done so, she will go to the meeting with a purpose, with a real interest, and with something to offer.

The teacher should not assume that the principal is the only one who is responsible for finding subjects or problems for the teachers' meetings. At least half of the problems for such meetings arise in the classroom under the immediate observation of the teacher. The need for more and better-adapted books, maps, and pictures to supplement her work, the problem of general lack of neatness in dress and in care of school property, the need for concerted effort in teaching manners and proper taste in dress, the question of promotion in the case of certain types of pupils, the question of poor attendance and tardiness — these and similar problems often appear to individual teachers first of all. These may very properly be brought up as possible subjects to be dealt with by the faculty together.

Group conferences. Special groups — primary teachers, teachers of mathematics, teachers of science — may wisely meet in conference under their supervisor to discuss problems of instruction in their special branches or problems that pertain to their work in a particular way. Illustrations would be the problem of beginning work in silent reading, the proper use of phonetics, the technique of teaching a given subject, the correlating of one subject with another, materials for use in projects, measuring the efficiency of pupils, revision of curriculum materials, and such allied topics as these may suggest.

Such conferences are the meetings of specialists engaged in the solution of special problems; their tasks may be narrow, but they may hope to be more technical and to go deeper into the details of the work.

Reading-circle work. If supervision is devoted to the tasks of perfecting and coördinating the work of instruction, then reading circles should provide a useful and a stimulating method of work. In another chapter the question of self-improvement of teachers has been dealt with, and suggestions for the teacher's professional reading were offered in some detail. The reading circle, in which meetings are held to discuss the books, is an excellent place for bringing the fruits of the reading to bear directly upon the work of the schools.

Let us assume, by way of illustration, that a circle of fifteen readers has just completed part of a new book on the elementary school curriculum. The problem to be discussed at the meeting has to do with the general meaning and nature of curricula. At a regular meeting someone will be asked to present a brief résumé of the chapters. This is completed in five minutes, and is carefully supplemented by others in another five. Previously it has been arranged that one member will speak for five minutes on "what cur-

ricula are for." She will have read several books and will explain Dewey's conception. Another will be prepared, in a similar way, to discuss "what makes a fact or an activity into subject-matter." Another will discuss "The city hall or the courthouse as a source of curriculum material." These short speeches will in each case lead out from the central theme of the circle book, so that each represents an interpretation and application of the book's meaning. Finally, over a cup of tea perhaps, this thirty minutes of formal speaking will be followed by informal discussion of the book and its applications in the present work of the schools.

Such work as this is cultural in a real sense. It is highly professional, and it is intellectually and socially stimulating and recreative in a large way. It will do more to give broad perspective to the work of the schools than any single kind of professional study, and stands as an excellent insurance against professional shortsightedness.

Demonstration teaching. As a means for extending supervisory helpfulness, there is nothing that can replace the value of demonstration teaching. To see another teach a class in accordance with a prearranged aim and method is of great value to a teacher. We learn much by imitation and carefully directed observation, and teachers should call on their supervisors for such assistance. The technique of questioning a class in a way that brings out the timid and exposes the blatant pupil, and that develops interest in real inquiry is an art as well as a science, and the art aspect can be grasped most readily by seeing the thing done.

Visiting other teachers. Visiting other teachers is a means of extending the idea of observation and demonstration work. Visiting other teachers at work has excellent supervision possibilities, if it is well planned. First, there must be a purpose and a plan of study, and this should be

determined upon in advance, with the help of the principal or supervisor. Second, a place to visit must be chosen with this purpose in mind. Third, the teacher must regard the visit as work, and prepare to give a good account of it later to her supervisor in private conference. Fourth, the visitor and the supervisor are paying a compliment to the teacher visited and may reasonably expect that questions will be answered gladly.

It is well for both parties to know in advance what the recitation is to try to demonstrate, and the plan and the methods that are to be used. It is quite proper to make such special arrangements, even to the extent of setting aside regular work for the occasion and providing for a conference immediately after the recitation.

Individual conferences. After a supervisor has observed a recitation a private conference should follow. In such a conference the teacher should have in mind what she would like to ask, and she should not let the conference close until she has a clear notion of exactly what was good and what was poor about her work. To attempt to explain away the weaknesses is to discourage the supervisor from telling the whole truth. To show a disposition to be depressed and discouraged may have a similar effect. To resent honest criticism is the best proof of unfitness. On the other hand, to accept it when it seems unfair or in error is very wrong. The teacher must stand on her own feet and not allow herself to be the victim of an inferiority complex. It is possible for a teacher to differ with a good supervisor, and, since it is the only means of clearing the situation, is often worth while for her to do so.

The use of exhibits. A very excellent means of supervision is the use of exhibits. The material can be shown in a special place — for example, spare space in the superintendent's offices. These exhibits should consist of the

actual products of the schools, and should cover all fields and types of work. Compositions, maps, paintings, drawings, penmanship, wood work, sewing, millinery, pasteboard construction, and project work of various kinds may be shown, all in wide variety and in profusion.

Such an exhibit, open at all hours, and with the articles fully and clearly labeled, is a mine of information for the teacher, and will prove a stimulus to the pupils as well.

Experiment and investigation. The basis of good teaching must be sound knowledge. The art of teaching is based upon facts. Facts about children — their bodies and their minds; facts about curricula — what they are made of, and how they are organized; and facts about school buildings and equipment — all are of value. Our knowledge of these factors, and of how each is involved in a teaching situation, is as yet inadequate. Our explorations in these fields must be carried forward in the schools themselves if we hope ever to arrive at the full truth. This means that researches of all kinds, including experiments, must be carried on by both teachers and school officers.

The teacher's place in such work is an important one. Without her intelligent coöperation we can never secure the full truth about the laws of learning and of teaching. Accordingly the modern teacher must be trained in the elements at least of scientific method, and she must be ready to assume responsibility in the investigations that must be carried on in the schools.

Such work is indispensable in a modern school or school system. The results obtained will be needed in answering questions, and so will often be turned to as a means of explaining and overcoming difficulties; they will often serve as a means, too, for looking ahead into the future. The spirit of scientific inquiry must pervade all school procedure, and, however much we may rely upon professional super-

vision, little or no real progress will be made until we begin to utilize the methods and the technique of modern research.

4. Measuring teaching efficiency

Being judged. The function of supervision cannot be sharply separated from certain other functions. Its relation to that of giving instruction is intimate and obvious, but its relation to the functions of inspection and administration is almost as close.

Not only in education, however, but in whatever occupation we follow, we are certain to be judged as to our efficiency and to be rather definitely rated as to our capacity for useful service. The merchant is judged and rated by his customers, and his profits rise or fall with the rating he receives. So it is with the barber, the plumber, the baker, the lawyer, the minister, and the doctor. The employee of the bank, of the store, of the construction engineer, of the road boss, and of any and all fields where service is purchased and paid for, is rated for worth, and wages or salaries are raised or lowered in accordance with that rating. It cannot be otherwise in teaching. The teacher is in a real world, and must compete for her place in it.

When this point is fully recognized our immediate thought is of how we are to be judged. This is everywhere an important matter. The business and the professional man and the tradesman complain of being unfairly judged. When we look at the ethics of the business world we see that there is much misjudging and false rating all along the line. This is true to some extent in all the professions, and is likely to remain so. Surely the teaching profession should not sit by and allow such a condition to continue without an effort to remedy the situation. Far from it. A system of sound ethics will not build itself up of its own initiative; it must be made a matter of conscious study and effort.

Who should rate the teacher. There are two things that the teacher is concerned about, viz., who shall rate her, and how the rating is to be made. We may never fully rule out jealousy and influence and malice, but we may reasonably hope to rule out a considerable proportion of error.

We should at least insist that in the teaching profession this rating shall be made by one who is competent to judge. This may be provided for in either of two ways. We may appoint inspectors whose special work it is to judge of the fitness of all workers, or we may accept the judgments of those in the system whose regular work puts them in a position to know the facts. Certainly no teacher would choose the former method, even if it were feasible as a matter of expense. Where, then, would the duty fall by the latter method? Obviously on supervisors and principals, who alone have intimate knowledge of the teacher's work.

With supervision, then, there must inevitably be associated this function of inspection. This is a fact not to be resented but to be recognized. Inspection gives the teacher every possible opportunity to market her ability at its true value. Much the same things count here as would count if the teacher were a clerk, a bookkeeper, a stenographer, a cook, a scrub-woman, or a nurse — frankness, honesty, sincere effort, industry, knowledge of the task, neatness, geniality, and the many other traits which these suggest. Above all there is the opportunity to demonstrate the ability to grow under instruction.

How may ratings be made. With these favorable chances of being fairly rated, how shall the ratings be made? Two methods have been used. Rough general estimates have been used, and rating scales or score cards. The former method was employed exclusively until recent years, and its weaknesses are well known; the latter method has been undertaken only in recent years, but shows excellent promise.

In case of failure, a teacher ought, if possible, to find out specifically why she has failed. By so doing she may hope to overcome the weakness and remain in the profession. The teaching profession must grow and improve. It must not lose members who have been trained, and who by intelligent effort may be able to succeed. From this broader standpoint, therefore, the teacher should know why and how she has failed. Herein we find reason to say that the profession must require the school authorities to state fully why the teacher is to be dismissed.

In justice to the teacher, then, and also as a means of bettering the profession, we need, and must have, specific knowledge as to the nature of teaching failure. This applies with equal force in cases of success. Why and how teachers fail and succeed being a matter of importance, from the standpoint of justice and from the standpoint of the development and the stabilization of the profession, we must have ratings based upon definite knowledge. These can be had only if we rate in definite terms.

No one is so competent to do this as are those to whom the teacher looks for specific and sympathetic help in her work. Inasmuch as such a rating device is of great value to the teacher as a means of analyzing her strong and weak points, and so is of much value as a means for self-improvement, a discussion of this device has been treated in that connection in an earlier chapter.

5. Chapter summary

In this chapter we have been concerned with the teacher's interests and responsibilities in the problems of supervision. We have thought of supervision from the standpoint of the actual needs the teacher has for assistance in her work. These needs are two: help in her own work direct, and help in coördinating her work with that of others. The nature of the machinery for accomplishing these ends was explained, and emphasis was placed upon the fact that the

success of supervision depends upon the genuine coöperation of the whole group of workers, including the teacher, and that each has a positive part to perform.

In section 2 of the chapter the problems of supervision were analyzed and classified. It was shown that the teacher reasonably may expect assistance in all her work, and the nature of her contact with her supervisor in each type of work was suggested. The teacher's duties were grouped under five general heads, 1, making and revising curricula; 2, managing her pupils; 3, giving instruction; 4, coördinating her work with that of other teachers; and 5, administrative and clerical duties.

From each of these types of work, cases were presented to show the nature of the function of supervision and the nature of the teacher's contact with the supervisor. At every point emphasis was laid upon the positive, constructive, and aggressive attitude which a teacher should assume, as opposed to the mere receptive attitude which so many teachers have. While the teacher should be receptive to the ideas of her supervisor, she should also help to shape the work of the supervisor by contributing something out of her own knowledge and experience. Especially, too, was it pointed out that a teacher is responsible for trying to find and define her own difficulties, and then for getting these before her supervisor and seeing to it that she receives real help on them.

The methods of supervision through teacher's meetings, group conferences, reading circles, demonstration teaching, individual conferences, visiting other teachers, the use of exhibits, and of experiments and research were discussed, and the ways in which the teacher could contribute and how she could obtain help were explained. Here emphasis was placed upon a proper attitude and effort, where the teacher seeks to learn and to help others rather than to guard her rights.

Finally, the connection between the functions of supervision and inspection, and the place and nature of inspection as a necessary function and one which no one could perform so well as the supervisor, were explained, and teacher-rating was shown to be not only necessary but a desirable method of inspection as well.

QUESTIONS FOR DISCUSSION

1. Define the term "supervision."
2. Show how supervision is a distinct function and yet is related to the functions of instruction, administration, and management.

3. Explain the need for supervision.
4. Explain the lines connecting the various officers shown in the organization chart given in this chapter.
5. List the main groups of problems in supervision.
6. Explain how supervision may be exercised in the process of making or revising courses of study. Give illustrations of just how a teacher may properly participate in such work, and the bearing this service may have upon her efficiency in giving instruction.
7. Illustrate how a teacher may need help in interpreting a course of study.
8. Suggest a list of difficulties with which a teacher might meet in her first attempt to introduce project work in teaching history.
9. In what sense is the problem of managing children a problem of giving instruction? How can an organization feature, such as a system of scoring papers, be utilized as an actual means of giving useful instruction?
10. Why do teachers often shrink from the supervisor, or even resent supervision?
11. List some problems which might furnish suitable subjects for teachers' meetings. Do the same for group conferences, and for private interviews between the teacher and her supervisor.
12. Explain why the function of inspection and teacher-rating must be fulfilled by supervisors.

PROBLEMS FOR INVESTIGATION

1. Make a study of the place of personality as a factor in teaching success, by classifying the items found under that heading in teacher-rating scales.
2. In a school survey report, or in current magazines, find a table showing the test scores obtained by a group of children. Make a list of questions about that table, such as you might wish answers for if you were diagnosing the class from the test results.
3. Outline a plan whereby a reading circle might hold a meeting to discuss this chapter on supervision. Select materials to supplement the chapter, and explain how they might be used in the meeting.
4. Make a list (from books on school management) of all the routine procedures that may be useful in managing a class in a large school. For each item in the list work out an explanation of how it may be used as an end and as a means in training. How could this be made the subject of a teacher's meeting?
5. Outline in detail plans for each of the following situations:
   a. You are to see a demonstration of sixth-grade arithmetic instruction.
   b. You are to visit an exhibit of third-grade composition work.

c. You have asked for a conference with your supervisor on how to bring certain pupils up to grade in reading.
d. You are to lead a reading-circle or group-conference discussion on the question of how to introduce project work (in a selected field) without losing step with the course of study.

REFERENCES FOR ADDITIONAL READING

Burton, William H. *Supervision and the Improvement of Teaching.* New York, D. Appleton & Co., 1923.

Cubberley, E. P. *The Principal and His School,* part IV. Boston, Houghton Mifflin Co., 1923.

Elementary School Journal. A dozen excellent articles bearing on this chapter will be found in the last three or four volumes of this journal. Consult the table of contents.

Gist, Arthur S. *Elementary School Supervision.* New York, Charles Scribner's Sons, 1926.

Nutt, Hubert Wilbur. *The Supervision of Instruction.* Boston, Houghton Mifflin Co., 1920.

Scott, Charles Edgar. *Educational Supervision.* Milwaukee, Bruce Publishing Co., 1924.

Sears, Jesse B. *The School Survey,* chap. XV. Boston, Houghton Mifflin Co., 1925.

Strayer, George D., and Engelhardt, N. L. *The Classroom Teacher,* chap. III. New York, American Book Co., 1920.

Whitney, F. L. *Growth of Teachers in Service.* New York, The Century Co., 1927.

CHAPTER XX

THE TEACHER AT WORK

Outline of Chapter

1. The teacher's position: Origin and place of the school — Making the school effective.
2. The teacher's relation to home and community life: Making school work vital — Putting the home to work — Making the school a social center — Beginning the work at home — Extension from school to community.
3. The teacher's relation to the school system: Her relation to the superintendent — Her relation to the principal — The occasional principal — Unnecessary misunderstandings between teacher and principal — The efficient principal — The teacher's relation to the supervisor.
4. The teacher's preparation for work: Daily routine — Lesson plans — Assignments; special cases; records.
5. Conserving time: Planning the day.
6. Keeping house: The schoolroom a model.
7. The teacher in her profession: Professional attitude.
8. Summary of Part IV — Questions — References.

1. The teacher's position

Origin and place of the school. The teacher stands at the immediate point of contact between the school, as an institution for the education of the people on the one hand, and the home and community life of the people on the other, and so must become an important working factor in each. She must remember that originally the school was not a separate institution. Children were taught by their parents, and only with the growing complexity of life did the home call in a teacher from the outside to direct the training of the children. The school of to-day is in its origin only a specialization of this simple practice. To restore it to its place as a real factor in the home and community life, is to do, then, not a new, but rather a very ancient thing.

Making the school effective. This means that the teacher must live among her patrons, enter into their community activities, and assume there the normal responsibilities of citizenship. How to find her way into the hearts of the

people and into their community enterprises, to bring with her the real message which the school must have, and to carry back from the life of the people the best it can give to the school, is a task which should command the best in energy, time, and imagination of any man or woman.

The teacher's work, then, is to discover and put to work all the educative forces to be found in her community, whether they are inside the school or out, and to direct those forces to the end that education shall become a large and permanent interest among the people, old and young — an interest not separated from, but intimately interwoven with, every other interest of worth in maintaining and enriching their lives.

2. The teacher's relation to home and community life

Making school work vital. Just how to develop this phase of teaching is what the teacher wants to know. A work that is wider than the school hours, wider than books, wider than relationship to children alone; that seeks to push the school into the home and the shop, and to bring the home and the shop into the school; that uses the economic and social life of the neighborhood as its laboratory, and the school in turn as the common center for the neighborhood's social life — how can this traditional, narrow, schoolmastery task be stretched to such proportions? [1]

Those who have recently succeeded in building up their schools along these lines are teachers who have not only

[1] More concrete suggestions than can be given in the short space here may be got by reading the following books, which are stories of just how such work had been built up. While their humor and pathos make them interesting in themselves, and excellent portrayals of human nature, yet these qualities do not hide the splendid educational messages they are meant to convey to teachers and parents. Wray, Angelina, *Jean Mitchel's School.* Quick, Herbert, *The Brown Mouse.* Patri, Angelo, *A Schoolmaster of the Great City.*

insisted that "education is life," [1] but have turned this definition about and tried to realize also that "life is education"; and in their schools have sought to interpret home and community life to the children. This means:

1. That their *curricula* have gone outside of books for many of their materials.
2. That their *methods* have benefited by suggestions from the normal behavior of children when they were working and playing at home or on the street.
3. That their *management* has utilized motives and incentives that were found to be effective in life outside the school.
4. That their *schoolhouses* have not remained sacred to childhood and to book learning alone.
5. That their *schools* have been of, by, and for the people, and hence the people were permitted to know intimately of their purposes, their means, and their results.
6. Finally, that the *teachers* were themselves citizens of the communities they served.

Elsewhere [2] have been presented illustrations of what it means to supplement the curriculum with materials drawn from life outside the school, and to utilize in methods and management such motives as are known to be effective when the child works and plays unhindered, but it remains here to be suggested to the teacher that the tiny drainage systems a few steps from her window, the offices and books of the city street department, the innumerable family grocery bills, the habitat of the friendly toad in the flower garden, the daily papers, the work of the city health department, and the ancient landmarks of the community, will not marshal themselves unaided into her geography, civics, arithmetic, nature study, reading, hygiene, and history materials. These things must be found and taken to the class, or, better still, where convenient, the class should be taken to them.

[1] See Chapter XI for the bearing of this point of view on subject-matter.
[2] See Chapters VIII and XI.

There are few laymen who are not quick to see the importance of these things and to help in making them available for school use when requested. The health officer in his laboratory can do more in a half hour to establish correct notions of public sanitation than can be done by textbook methods in a week. No prosecuting attorney or police judge is too busy to present to the classes in civics something of the practical workings of the laws referred to in their textbooks. It remains only for the teacher to coördinate and direct these forces.

Putting the home to work. In addition to selecting materials from outside, and calling upon a few individuals to render some specific service, the teacher must also put the home to work. The child is at home more than he is anywhere else, and the home must be kept consciously at work with his education if our home-school-community relationship is to be maintained. That idea has been successfully developed in numerous rural and city schools by granting school credit for home work.[1] This is a direct means of making normal, healthful home life educative, and that in a large and important sense. Each child is assigned some definite work to do, such as building fires, caring for stock, washing dishes, sweeping, or any other of the hundred tasks that too frequently fall to mother to do, or are paid for out of the family earnings.

Making the school a social center. In the last decade much has been said and written about the school as a social center.[2] Before the building of cities and factories, before the vast expansion of the corporate method of doing business, people lived mostly in the country, and on the farm

[1] See Alderman, L. R., *School Industrial Credit and Home Industrial Work.* In Massachusetts some home-project work is required as a part of all courses in agriculture given in the State-aided schools.

[2] See especially Ward, E. G., *The Social Center.* D. Appleton & Co., New York.

all the essential processes of our civilization were carried out. Then each community was practically sufficient to itself. Life was simple, and, owing to the numerous occupations present, and to the methods of neighborly exchange of labor, it was varied. To-day this is all changed. Occupations are mechanized and specialized, and the possibility and occasion for the old husking bee, barn-raising, and community harvesting have disappeared. The home, once on most intimate terms with all the homes near by, is now isolated, and if any social intercourse is had with neighbors some artificial reason for providing the opportunity has first to be figured out. The result in rural sections has been loneliness and social disintegration, while in the city it is a problem of congestion with its inevitable consequence, the slum.

The school has been called upon to meet this need. To do this the school must become in fact a "social center." In many places, and in a wide variety of ways, this has been accomplished. In some States definite laws governing social center activities have been enacted.

Beginning the work at home. How can this be done? First of all, it is the proper business of the teacher to initiate such a movement if it is not already started. To do this it is wiser to begin with her own immediate needs for the school, rather than to attempt to organize forces entirely disconnected with her position. What is *our* special school need, should be her first question to herself. Perhaps it is fresh additions to the library, or other teaching equipment. Perhaps it is a plot of ground for nature study and gardening; or pictures to ornament the schoolroom; or better toilet facilities; or a jacketed stove with better arrangements for ventilation; or sanitary drinking-fountains; or flowers and shrubbery for the grounds; or almost any of a hundred things that teacher and principal can quickly name.

Once parents are apprised of these needs it is easy to find some one, possibly an organization, to espouse the school's cause. Meetings of those interested are called at the schoolhouse, and the situation is fully gone into and discussed. Perhaps recommendations will be made to the school board, perhaps other organizations are called in, and finally a parent-teachers' association or a public welfare club of some sort will take form. If so, it will be an organization with its work already outlined.

Extension from school to community. From an open neighborhood discussion of school needs may naturally develop, with little guidance, discussion of other community needs, such as good roads; supervision of moving-picture programs; joint purchasing or marketing facilities; cleaner and more artistic streets; better public health protection; a larger schoolhouse, with assembly hall and moving-picture facilities; a branch of the public library for the school; an extra teacher; a supervisor of play and community recreation; and other greater and lesser needs.

Occasionally the school children will furnish an evening's entertainment, at which time a full display of all kinds of school and home-project work may be made. Other entertainments will be provided by the combined musical talent of the neighborhood; or an outside speaker will be brought in to discuss some important local issue of a political, social, religious, economic, or educational character. Thus the people are drawn together along natural lines, the community is energized and stabilized, and the school, instead of being isolated and neglected, is drawn into natural and essential alignment with other local interests, and serves an extensive social as well as educational need. In this broader educational scheme, the teacher occupies a place of leadership and responsibility among the people, while the people know more intimately than they did formerly what the

school is doing, and consciously share its burdens as they share in all other local enterprises.[1]

3. The teacher's relation to the school system

The teacher is but a single link in the long chain of officers and materials concerned with the training of children. She plays a single part in a large program, and must therefore understand that program, and the other players in it, if she is not to miss her cue and spoil the play. The State, the community, and the home are all concerned that this program shall be a success, and, aside from the direct and indirect assistance rendered by each, there has been set up a complex educational machine consisting of State and local superintendents, principals, supervisors, and teachers for carrying on this work. It is only by hearty coöperation among these officers that any large educational service can be rendered.

Her relation to the superintendent. Aside from realizing that every school is a State institution, and that teachers are State officers, responsible to State authorities for a proper performance of their duties, the teacher's first concern is with the city, county, or township superintendent of schools. This officer is expected to lay out and direct the general school policy for a large number of schools. Just what this policy is, and how it affects her interpretation of the curriculum, and the organization and management of her daily work, it is the teacher's business to know. To do this she should know her superintendent personally, where possible; she should know something of his ambitions for the school system as a whole; she should learn all she can

[1] For a suggested constitution for such an improvement club in a country school as is here suggested, and for suggestive programs of meetings, see *Social and Civic Work in Country Communities.* State Department of Education, Madison, Wisconsin, Bulletin no. 18, 1913.

of his methods of work; she should hear his addresses, and read his bulletins and reports — and through these means try to catch the spirit of his office and to feel the inspiration of his leadership. In rural or small communities she will often go directly to him with her own problems, receive instructions from him and render reports to his office.

Her relation to the principal. It is to the principal the teacher must look for the intimate and detailed suggestions and instructions about her daily work. She is teaching a single grade, or perhaps a single subject in several grades. She has entire charge of a group of children for one of the eight years they spend in the school, or of a number of classes in one subject through several years. In either case she is dealing with a part of a larger whole. She is carrying out a single section of an eight-year curriculum, and is directing a single cross section of the child's development. The beginning teacher, in particular, will early need to learn that her task is not an isolated one, and that her teaching will be effective only when it is intimately coördinated with that of the whole teaching force. This coördination it is the business of the principal to effect. He will do it by suggestions, and at times by specific directions, to his teachers.

The teacher, therefore, must understand that the principal is the highest authority in the school, and that it is her part to assist him in carrying out his policy of education for that community. This teacher-principal relationship, in many ways the most important single relationship in our whole educational scheme, is very often misinterpreted by both principals and teachers.

The occasional principal. An occasional principal feels called upon to exercise his authority at every turn, and is satisfied with his accomplishment only when his teachers fear him. This principal hews exactly to the line. If his curriculum calls for compositions of three paragraphs in the

sixth grade, then three it must be or the teacher will receive a demerit mark.

Such principals are rapidly giving place to a new type of educational director who rules by virtue of a scientific understanding of his work, and by personal qualities of leadership, rather than by authority which has been delegated to him. Such a principal deals with facts and with personalities; gives directions, rather than orders; leads, rather than drives; and expects his teachers to think for themselves.

Unnecessary misunderstandings between teacher and principal. Teachers cannot always select their own principals, but no teacher should sacrifice her own individuality, to say nothing of depraving the true rights and responsibilities of the teacher's office by becoming a mere servant to an unreasoning boss. There is danger, however, of errors on the teacher's part also. The efficient principal must conduct his business with dispatch. Frequently he cannot stop to explain fully his reasons for the directions he gives; frequently he must decide things in faculty meetings, when there is indecision or a pronounced difference of opinion among the teachers; frequently he cannot grant all the requests that come to his office. The teacher of narrow vision often mistakes these as personal rebukes to herself. What is needed by each is, first, a thorough understanding of their respective rights and duties; second, an absolutely open and aboveboard method of dealing with each other; third, a real desire for, and effort at, coöperation; and, finally, a high sense of loyalty to each other and to the essential purposes of the school.

The efficient principal. The principal is expected to give a clear interpretation of the curriculum as he desires it to be executed, but leaves to the teacher the details of carrying on the work. He outlines the plan of organization for the

children, for the materials of the curriculum, for directing playground activities, and trusts to the intelligence of his teachers to find the best methods of putting the plans into effect. He defines the character and amount of the knowledge and skill along given lines which he expects the children to have at a given time, but leaves the teacher quite free to say just how she will accomplish those ends. He orders supplies and equipment, but does not dictate the details of their use.

In all these things the efficient principal will necessarily draw heavily upon the judgment of the teacher. He will make promotions, but very much more in terms of the teacher's judgment than in terms of any test he can apply. He will determine upon a plan for conducting fire drills, and for the entrance and exit of the children, but only with the most careful assistance of the teachers, who are to be in charge. He will make up the term or annual budget for the school, but very largely in terms of estimated needs supplied by the teachers. He may administer the more severe cases of discipline, but it will always be after consultation with the teacher in charge.

The teacher's relation to the supervisor. Aside from the principal there will be in many schools one or more special supervisors of defined fields of work, such as a supervisor of music, of domestic science, of writing, or of drawing. It is the business of this officer to outline and give intimate direction to the instruction in the subject in question. This outline, with more or less detailed specifications, the teacher is expected to carry out. In doing this she is working as an assistant under the directions of an expert, and her success will depend upon her ability to learn from the expert and to carry out his directions in conducting her recitations. This important relationship is more fully explained in chapter XIX.

4. The teacher's preparation for work

Daily routine. Elsewhere we have discussed the general preparation and growth of the teacher. Here it is desirable to consider the question of her daily preparation for the tasks in hand. Each day brings its problems of routine and its new problems, and without some definite preparation the procedure is likely to become too stereotyped in one case and too halting and uncertain in another. The nature and extent of preparation will vary slightly from day to day, but the following items will appear fairly regularly on every teacher's daily program: Preparation of lesson to be taught; preparation of assignments; getting the necessary materials and equipment ready; careful consideration of special cases of deficiency in discipline or in scholarship, with preparation for meeting them; records and reports to be made; and room to be put in order. The time for doing most of these things is the evening before.

Lesson plans. What is involved in preparing the lessons to be taught? Let us examine as an illustration such preparation for a beginning teacher, for it is only necessary to remove a few details and shorten the written plans to make such a case suitable for experienced teachers as well. First, the entire lesson should be gone over in order to see exactly what it includes, how it is related to previous lessons, and the extent to which it will need to be supplemented by other materials. This done, the next step is to find the materials to be used, and to determine what things the children are to use and how they are to use them. Finally, make brief notes in a "daily lesson-plan book" on what is to be used, and the steps in the procedure. There will be books, or papers, or pictures, or objects of one sort or another to get together; possibly the class is to be taken outside for a study of the school gardens or of the habitat of some wild flowers or insects close by; and all these things

must be seen and very definite plans made for handling them in the classroom, or for handling the class out of doors.

Assignment; special cases; records. The preparation of assignments must be made in a similar manner, and written plans must make clear where the materials are, how they are to be got by the children, and how the lesson is related to the one just recited. There need be no great amount of formality about these plans, except that at first they should be made rather full and specific, and so that they can be readily understood by the principal, who will look them over from time to time in order to help the young teacher to get a right start.

Then there are special cases to prepare for. John is behind and is rapidly losing interest in language. What he needs is a real motive for wanting to use language. Similarly, cases of discipline may often be foreseen and obviated by the exercise of a little ingenuity on the evening before they are to be dealt with.

Too much emphasis cannot be placed upon the wisdom of making up school records at the end of each day, before leaving school. Such a plan guarantees greater accuracy, relieves the teacher's mind, and facilitates the work of the principal or attendance officer in case such records are wanted in the teacher's absence.

5. Conserving time

Planning the day. In all these things the teacher must learn that most precious of arts, the art of conserving time. A keen time sense is an important part of every teacher's equipment. Along with the teacher's motto, "A place for everything and everything in its place," should go, "A time for everything and everything on time," and "Do it now." No teacher can spare half her evenings for social diversion without placing a serious drain upon her time and energy.

There should be set aside a certain portion of the evening of each work day for definite preparation for the next day's tasks, and another portion for reading on the program suggested on page 325. The after-school hours will hold sacred an allotted time for making records, correcting papers, holding conferences, shaping things in general for the next day, and, finally, for some out-of-doors recreation.

6. Keeping house

The schoolroom a model. For many children the beginning lessons in good housekeeping are got at school. For this reason, if not for the sake of saving her own time and energy, the teacher should learn to be a good housekeeper. She should not assume the duties of the janitor, but when she sees an accumulation of dust on the picture frames and window casings, and ink spots on the floor or desks, and chalk trays laden with dust, and broken furniture, she should see that the janitor discharges his own duties more fully. Neither should the teacher rob the children of their own proper responsibilities in keeping the room orderly and home-like. Disarranged desks; scraps of paper or an undue amount of dirt under a seat; the cloak-room floor strewn with wraps, basket-balls, bats, and gloves; children with dirty hands, or with disheveled clothing or hair; library books in the wrong place; children sitting in slovenly positions, or walking awkwardly — these matters it is not the teacher's business to set straight; it is her business to see that the particular children who are responsible shall do the setting straight for themselves.

In all these things the teacher is herself the model, exemplifying the practice she enforces among the children by her supervision. Her own desk should not be a mixture of stale bouquets, marbles, jackknives, papers, erasers, books, and wraps, but should always be a model of good order. The

pictures should be kept hanging straight, the window shades rendering service, the wastebasket in place, supplies available in good order, torn books put aside for mending, dictionary and other reference books easily available, and over all a homelike atmosphere that is created by her own gentle manners.

7. The teacher in her profession

Professional attitudes. Finally, the teacher is to learn and live up to the standards of her profession. There are personal, ethical, and professional standards for the teaching profession, as there are for the legal and medical professions. In some ways these standards are not so clearly defined for the teaching profession as for other professions, owing largely to the former's being a more recent development, to the nomadic tendency among teachers, and to the large number of temporary members. Yet some standards are well established, and others are rapidly becoming so.

First, the teacher must respect herself and the work she is engaged in. She cannot defend the dignity of her calling and be herself undignified. The teacher who sneers at teaching, or who tries to hide the fact that she is a teacher, is not above her fellows, but is distinctly unworthy of membership with them. Teaching is not a contemptible calling for weaklings, and the teacher must learn to stand on her own feet and think and act for herself as a technically trained public servant.

Secondly, she must respect the highest standards that are set for scholarship and professional training, and frown down the tendency of laymen to pass judgment on educational values of which they have no special knowledge. This is one of the nuisances in the educational world which teachers ought to combat more vigorously than they do. For a parent or a member of a lay school committee to try to

pass judgment on a teacher's methods, or on the value of teaching appliances, is exactly parallel to the case of laymen who undertake to diagnose any and every sort of illness that may arise.

Third, the teacher must respect the work of her fellows. Blaming some former teacher, or scoffing at or belittling another teacher's work in order to shield herself, is equaled only by such tricks as seeking a position that is not vacant or trying to bring the principal or some fellow teacher into disrepute.

Fourth, the teacher who would live up to the best standards of her profession must demand a reasonable salary, must emphasize the idea of service, must avoid that overdogmatic attitude of mind so detrimental to wholesome growth and pleasant companionship, must refrain from seeming superior to other people, and must keep herself personally clean and progressive.

8. Summary of Part IV

In the chapters of this part we have set forth in brief discussion those more or less personal problems which the teacher must master if she is to hold a real place in her chosen profession. We have not tried to think of the teacher apart from her work, but quite the opposite, for we have made her professional, social, and personal responsibilities everywhere the test of the virtues we would have her possess. Our standards have been set high for the reason that only men and women of worth should be privileged to direct the training of our future citizens.

The first problem is that of personality. Everywhere example is stronger than precept, and the full significance of this ancient axiom for teachers should be suggested by our brief discussion of the teacher's personality. Such a character as we have demanded there is not attained in a day, but it is attainable for those who are willing to pay the price. It calls for earnest, intelligent, and continuous effort and study. Real leadership calls for action backed up by knowledge and love of service. Becoming a leader demands right ideals, right principles and attitudes, and right habits and

thoughts, and these are not to be gained by viewing them from afar or by reading about men who possess them.

The second problem is that of training and growth. Here also the standard is set high, because the demands of the future will be constantly rising. The teacher must not only know books, she must know men and affairs, else the facts she teaches will be without perspective. In addition to this she must know the school — its ideals and purposes, its possibilities, its methods, and the children it serves. This she cannot do unless she grows in knowledge and experience. To this end, she must adopt some plan of self-education, and keep to it from year to year.

The third problem is that of the teacher's health. It is not a pale face and a stooped form that we want to set as an example to growing children. Only men and women of red blood and sturdy physique can do well the work a teacher must do. Exercise and wholesome enjoyment go well with hard work. They keep the mind open and the body strong, and add force to thought and act.

It is believed that the extent to which these standards of personality, training, and health have been attained are likely to show in the teacher's work. Accordingly, in our two final chapters, we have tried to show the bearing of these attainments upon the teacher's conception of her position; upon the relationship which she establishes with her patrons, and with her fellow-teachers and school officers; upon her own preparation and methods of work; upon the way in which she conserves her own time and energy; and upon her own professional standards.

The teacher who lives up to all the possibilities we have suggested here might perhaps be our ideal teacher. It is believed, notwithstanding this, that these standards are practically attainable for the vigorous, purposeful teacher of to-day.

QUESTIONS FOR DISCUSSION

1. Explain what you understand to be the distinction between the traditional school program and the type suggested on page 377, and discuss ways and means for realizing in practice the six numbered principles there set forth as characterizing such a school.
2. What is meant by social center? Enumerate the specific lines of service such an institution might render in a country community, in an industrial community, in a mining center, in a small village, in a residence section of a large city.

3. Work out a plan for utilizing and crediting as school work lines of home work suited to your own community.
4. Make out a sample program for a community-center meeting in your school, or in some school you know.
5. Explain just what you would regard as your duty to the superintendent of schools in a city, and to the principal of your own school.
6. Try to draw the line of rights and duties that connects the work of the principal with that of the teacher. What is the importance of guarding strictly the rights of the teacher against encroachments from other school officers?
7. Distinguish between the principal who administers the school in terms of authority delegated to his office, and the principal who administers in terms of his superior knowledge and skill.
8. Outline a scheme for keeping a daily plan-book. Draw up a plan for teaching a lesson on some topic in history. Make the necessary notes in preparation for assigning the lesson that is to follow.
9. Show what you would put into your plan-book for a lesson to include a field trip to study polliwogs.
10. Make a list of the ethical standards which you consider to be well established in the teaching profession. What others should be established?

REFERENCES FOR ADDITIONAL READING

Bennett, H. E. *School Efficiency*, chaps. VIII, XV, XXVII, XXX. New York, Ginn & Co., 1917.

Buckingham, B. R. *Research for Teachers*. New York, Silver, Burdett & Co., 1926.

Foght, H. W. *The Rural Teacher and His Work*, part I, chaps. V, VI; part II, chap. IV. New York, The Macmillan Co., 1917.

Whitney, F. L. *The Growth of Teachers in Service*. New York, The Century Co., 1927.

Wilkinson, W. A. *Rural School Management*, chaps. II, XIV, XV. Chicago, Silver, Burdett & Co., 1917.

INDEX

Absence, causes of, 58, 59; individual treatment of cases of, 60.
Acceleration, measurement of, 161–64.
Administration, teacher and, 362, 363.
Age, distribution of teachers according to, 335, 336.
Age-grade position, 162.
Aim, changing, 21; function of in management, 21–30; importance of modern social, 23; relation to method, 23, 24; importance of clear, 24–27; of recess, 25; cost of indefinite, 25, 26; relation to motive, 26; in habit formation, 26, 27; critical study of, 27–29; in study, 221, 222, 228–31; of recitation, 243–52.
Aim of school, general, 8–11; from child's viewpoint, 9; from society's viewpoint, 9; need for specific, 10, 11; health as, 11, 12; morality as, 12, 13; knowledge as, 13–15; vocational or utilitarian, 15, 16; æsthetic, 16, 17.
Air space, adequate, 342.
Alderman, L. R., *School Industrial Credit and Home Industrial Work*, 378 *n.*
American School Board Journal, 59.
Anderson, W. N., 315 *n.*
Appearance, teacher's personal, 301, 302.
Assignment, making of, 229–31, 386.
Attendance, problem of, 57–63; interest of state in, 57, 58; compulsory, 57, 58; causes of poor, 58–60; results of poor, 59; necessity of records and reports, 59, 60; prevention and correction of poor, 61–63; punishment of poor, 61, 62; department of, 62; testing of, 268.
Ayer, F. C., *Studies in Administrative Research*, 206 *n.*
Ayers, L. P., 59 *n.*; *Laggards in Our Schools*, 144 *n.*

Bagley, W. C., and Kyte, G. C., *The California Curriculum Study*, 186 *n.*, 206 *n.*
Baldwin, J. M., *The Individual and Society*, 8 *n.*
Bassett, L. E., *A Handbook of Oral Reading*, 304 *n.*
Batavia system, 159.
Behavior, as environment, 74, 75.
Berkeley, Cal., plan of instruction, 138–40.
Board of education, function of, 48, 49.
Bobbitt, J. F., *The Public Schools of South Bend, Indiana*, 318 *n.*
Boyce, A. C., *A Method for Guiding and Controlling the Judging of Teacher Efficiency*, 321, 322 *n.*
Breeding, good, essential in teacher, 301.
Bronner, A. F., *A Comparative Study of Intelligence of Delinquent Girls*, 282 *n.*
Buckingham, B. R., *Supply and Demand in Teacher Training*, 313 *n.*, 318 *n.*
Buellesfield, H., 67 *n.*, 320 *n.*
Burk, C. F., 157 *n.*
Burk, F., *Individual Instruction*, 159 *n.*
Burt, C., *The Young Delinquent*, 282 *n.*
Butte, Montana, *Report of a Survey of the School System of Butte*, 339 *n.*

Cambridge plan, of grading, 155.
Capacity, 33.
Certification, improving requirements for, 313, 314.
Chicago, University of, 189.
Child, object of management, 31, 55; native equipment of, 33–36;

survey of facts concerning community and, 179, 180.
Childhood, responsive character of, 56.
City School Leaflets, 207 *n.*
Clapp, F. L., *Scholarship in Relation to Teaching*, 320 *n.*
Cleanliness, formation of habits of, 133.
Cleveland, age of teachers in city of, 336.
Cleveland Education Survey, 339 *n.*
Coffman, L. D., *The Social Composition of the Teaching Population*, 318 *n.*, 335, 336 *n.*
Collecting, instinct of, 36.
Columbia University, 189.
Community, survey of facts concerning child and, 179, 180; position of teacher in, 375, 376; relation of teacher to, 376–81; teacher as leader in, 380.
Competition, dangers of, 106, 107; dangers of as incentive, 111–13; in recitation, 249.
Conferences, group, with supervisors, 365; individual, with supervisors, 367.
Construction, instinct of, 35.
Conversation, teacher's, 302, 303.
Cook, K. M., *State Laws and Regulations Governing Teachers' Certificates*, 314 *n.*
Cook, and O'Shea, *The Child and His Spelling*, 182 *n.*
Coöperation, in recitation, 249.
Coördination, need of in school work, 351, 352.
Courses, number offered, 199–201; possibility of alternating, 201, 202; combinations of, 202.
Course of study, making and revising, 357, 358; relation of supervision to interpretation of, 358, 359. *See also* Curriculum.
Crampton, C. W., 144 *n.*
Cubberley, E. P., *Public School Administration*, 154, 155, 156, 158 *n.*; *School Organization and Administration*, 339 *n.*
Curiosity, instinct of, 35, 36.
Curriculum, grading and making of, 142, 143; the school, 170–94; two essential viewpoints, 171, 172; changing nature of, 173, 174; fads and frills in, 174; teacher's interpretation of, 174–76; as a body of experience, 175, 176; as a body of knowledge, 175, 176; socializing and motivating, 176–80; teacher's responsibility, 178, 179; types of subject-matter in, 180–83; tendency in making, 183–89; current view of revision of, 184; teacher and revision of, 187, 188; problems in making and revision of, 188, 189; teacher and, 353, 357–59; meaning of, 357; making of a joint enterprise, 358; and outside material, 377, 378. *See also* Course of Study.

Dalton Laboratory Plan, 114, 189.
Decision, in training of personality, 305, 306.
Demonstration teaching, 366.
Devices, as incentives, 110, 111.
De Voss, Monroe, and Kelly, *Educational Tests and Measurements*, 150 *n.*, 280 *n.*
Dewey, J., *Schools of To-morrow*, 160 *n.*; "Course of Study, Theory of," in Monroe's *Cyclopedia of Education*, 173 *n.*
Dickson, V. E., *Mental Tests and the Classroom Teacher*, 145 *n.*, 149 *n.*, 150 *n.*
Differences, individual. *See* Individual differences.
Discipline, meaning of, 66, 67; causes of bad, 68–73; influence of bad, 73, 74; conditions of good, 75–80; and public opinion in school, 75–80; testing of, 268.
Diseases, control of contagious, 342.
Drill, as aim of recitation, 250, 251.

Earhart, L. B., *Systematic Study in the Elementary School*, 221 *n.*; *Types of Teaching*, 253 *n.*
Education, as expression, 3–5; essential to life, 3, 4; as inhibition,

5–7; natural *versus* artificial, 7; changing conceptions of, 183, 184; process of change, 266; tendency away from generalities, 266, 267.
Efficiency, measurement of teaching, 369–71.
Effort, relation to interest, 100, 101.
Elliott, E. C., *Provisional Plan for the Measure of Merit of Teachers*, 322 *n.*; Starch and, on reliability in grading, 273 *n.*
Emulation, instinct of, 36.
English, correct, essential in teacher, 303, 304.
Environment, in school management, 43–48; behavior as, 74, 75.
Everts, J. E., *The Speaking Voice*, 304 *n.*
Examination, as means of measurement, 271–76; new type of written, 274–76; recall type of, 274; right or best answer type, 275, 276.
Exercise, the teacher's, 344.
Exhibits, as incentive, 109, 110; use of, 367, 368.
Experiment, and investigation, 368, 369.

Failure, reasons for teachers', 320.
Fairhope School, 189.
Fatigue, problem of, 208–11.
Fire drill, 131, 132.
Fisk, and Fisher, *How to Live*, 345.
Fiske, J., on period of infancy, 32.
Fisher, and Fisk, *How to Live*, 345.
Flanders, J. K., *Legislative Control of the Elementary Curriculum*, 200 *n.*
Francis Parker School, 189.
Franklin, B., 299.
Frankness, essential in teacher, 297.
Freeman, F. N., *The Teaching of Handwriting*, 197 *n.*; *Mental Tests*, 280.

Gladstone, W., 297.
Grading, as an incentive, 108, 109; problem of, 138–40; proper bases for, 142–51; and curriculum making, 142, 143; untrustworthiness of teacher's judgment, 151, 152; importance of flexibility in, 153–57; single-course plan of, 154, 155; multiple-course plan of, 155–57; differentiated-course plan of, 156; of subjects, 186, 187; teacher and scheme of, 353.
Gregariousness, instinct of, 36.

Habits, aim in formation of, 26, 27; formation of, 37, 38; training pupil in proper, 101, 102; of order and cleanliness, 133; of work, development of right, 249, 250; formation of in personality training, 306–08.
Hamaide, A., *The Decrole Class: A Contributor to Elementary Education*, 160 *n.*
Harris, W. T., on promotion, 158.
Health, as school aim, 11, 12; school and problems of, 38, 39; teacher's, 335–43; causes of teachers' poor, 338–41.
Heating, and teacher's health, 339.
Hebb, B. Y., *City School Leaflet*, 331 *n.*
Hoag, E. B., *The Health Index of Children*, 341 *n.*
Holmes, H. W., 205 *n.*
Home, relation of teacher to, 376–81; school credit and work in, 378.
Homogeneity, in recitation group, 258–61.
Honor rolls, as incentive, 112.
Hope, K. J., *Placement of Children in the Elementary Grades*, 152 *n.*
Housekeeping, teacher as model of, 387, 388.
Humidity, proper, 342.
Hutchinson, W., *Exercise and Health*, 345.
Hygiene, standards of, 341, 342.

Ideals, as incentives, 113, 114.
Imitation, instinct of, 35.
Incentive, in management, 99–120; meaning of term, 99–102; effective, 102–07; a means not an end, 102, 103; need of immediate appeal, 103, 104; adaptation to age, 104, 105; positive appeal, 105, 106; negative, 106; types of, 107–14;

incident to regular organization, 107–10; grading as, 108, 109; incident to teaching method, 110, 111; and acquired interests, 113, 114; in socialized recitation, 114, 115; in project work, 115, 116.
Individual differences, school and, 40, 41; in general intelligence, 145–50; measurement of, 277, 278.
Infancy, period of, 32.
Inspection, and supervision, 370.
Instinct, 33; and the school, 33–36; modifiability of, 33, 34, 36; play, 34, 35; constructive, 35; of imitation, 35; of curiosity, 35, 36; collecting and hoarding, 36; gregarious, 36; of emulation, 36.
Instruction, class and individual systems of, 140–42; Batavia system of, 159; relation of supervisor to giving of, 359, 360.
Intelligence, individual differences in general, 145–50; distribution of, 146, 147.
Intelligence quotient, 145, 146.
Interest, relation to effort, 100, 101; problem of, 208–11; testing of, 268, 269.
Investigation, and experiment, 368, 369.

James, W., on habits, 38.
Jessup, W. A., 207 *n.*; *The Teaching Staff*, 336 *n.*
Junior high school, 196.

Kelley, T. L., *Interpretations of Educational Measurements*, 150 *n.*
Kelly, Monroe, De Voss and, *Educational Tests and Measurements*, 150 *n.*, 280 *n.*
Kennedy, J., 159 *n.*
Klapper, P., 62 *n.*
Knight, F. B., *Qualities Connected with Success in Teaching*, 320 *n.*
Knowledge, as school aim, 13–15.
Kratz, H. E., *Studies and Observations in the Schoolroom*, 302 *n.*
Kyte, G. C., and Bagley, W. C., *The California Curriculum Study*, 186 *n.*

Learning process, management of, 228–37.
Light, teacher's health and bad, 338, 339; proper, 342.
Lincoln, A., 297.
Locke, J., *Some Thoughts Concerning Education*, 301 *n.*

Mackenzie, W. L., *The Health of the School Child*, 342 *n.*
McCall, W. A., *How to Measure in Education*, 150 *n.*
McMurry, F., *The Method of the Recitation*, 253 *n.*
Management, function of aim in, 21–30; traditional *versus* personal methods of, 22; human factors in, 31–42; environmental factors in, 43–48; test of efficient, 45, 46; a rational process, 47, 48; incentives in, 99–120; of children, relation of supervision to, 360–62.
Marking, variability in, 273, 274; teacher and system of, 353, 354.
Massachusetts Board of Education, Sixtieth Annual Report of, 204 *n.*
Materials, use of for study, 232–34.
Measurement, quantitative viewpoint essential, 270, 271; by records and reports, 271; examination as means of, 271–76; of individual differences, 277, 278; of teaching efficiency, 369–71. *See also* Testing.
Measures, teacher's need of accurate, 278–80.
Meetings, professional, 328, 329; teachers', 363, 364.
Membership, development of sense of, 56, 57, 361; testing of, 267, 268.
Mill, J. S., *Dissertations and Discussions*, 90 *n.*
Miner, J. B., *Deficiency and Delinquency*, 282 *n.*
Missouri, University of, 189.
Monitorship, as incentive, 109.
Monroe, W. S., *Measuring the Results of Teaching*, and *The Theory of Educational Measurements*, 150 *n.*; De Voss and Kelly and,

Educational Tests and Measurements, 150 *n.*, 280 *n.*
Monroe, *Cyclopedia of Education*, 173 *n.*
Morality, as school aim, 12, 13.
Motive, relation to aim, 26; in study, 231, 232.

National Education Association, *Public School Salaries in 1924–1925*, 314 *n.*
National Society for the Study of Education, Twenty-Sixth Yearbook of the, 160 *n.*, 185 *n.*; *Fourteenth Yearbook of*, 294 *n.*

Observation, as aim of recitation, 250.
Offner, and Whipple, *Mental Fatigue*, 209 *n.*
Optimism, essential in teacher, 300, 301.
Order, causes of bad, 68–73; conditions of good, 75–80; putting schoolroom in, 128; formation of habits of, 133. *See also* Discipline.
Organization, of the school, 123–37; nature and purpose of, 124–26; as means and as end, 126; mechanical features of, 130–35; of the day's work, 195–203.
O'Shea, Cook and, *The Child and His Spelling*, 182 *n.*

Parkinson, B. L., 313 *n.*
Patri, A., *A Schoolmaster of the Great City*, 376 *n.*
Payne, B. R., *Public Elementary School Curriculum*, 204 *n.*
Pension systems, State, 336.
Personality, of teacher, 293–311; training for, 304–09.
Plans, steps in making, 45; of procedure, 46, 47; for first day, 127–30; lesson, 385, 386.
Platoon plan, 198 *n.*
Play, aim of, 25; supervised, 25; instinct of, 34, 35.
Portland, Oregon, *Report of a Survey of the Public School System*, 339 *n.*
Practice, and theory in management, 22–24.
Predisposition, 33.
Principal, relation of teacher to, 382–84; efficient, 383, 384.
Prizes, dangers of competitive, 106, 107, 111–13.
Proctor, W. M., *Vocational and Educational Guidance*, 150 *n.*
Professional meetings, 328, 329.
Program, daily, 133, 134, 195–219; principles and problems in making of, 196, 197; divisions of daily, 202, 203; preparation of, 207–11; a three-class, 212, 213; for rural school, 214–16; use of, 216.
Programs, holiday, as incentive, 109; typical, 211–16.
Progress, rate of, 163, 164.
Project method, 185 *n.*, 196.
Project work, incentive in, 115, 116.
Promotion, as an incentive, 108, 109; by grades and by subjects, 158, 159; by subjects, 159; teacher and scheme of, 353. *See also* Grading.
Promptness, teacher example in, 128.
Punishment, of poor attendance, 61, 62; reason for, 83; old and new ideas of, 84, 85; corporal, 84, 91; purpose of, 85–87; meaning of, 85, 86; characteristics of effective, 87, 88; theory of natural, 88–90; kinds of, 90–92; administration of, 92–96; as part of teaching, 92, 93; individualistic nature of, 93, 94; time and place for, 94, 95; teacher's responsibility for, 95, 96.

Quick, H., *The Brown Mouse*, 376 *n.*

Rating, of teaching efficiency, 370, 371.
Reading, teacher's, 324–28; suggested material for one year's, 325–28.
Reading-circle, work of, 365, 366.
Readjustment, continuous need of, 160–65.
Recess, aim of, 25.
Recitation, incentive in socialized, 114, 115; periods, 199; nature and purpose of, 241–43; aim of, 243–52; teacher's problem in, 244;

tests of, 244–46; products of, 246, 247; testing as aim of, 247, 248; teaching as aim of, 248–50; observation as aim of, 250; drill as aim of, 250, 251; plan of, 252, 253; topical plan of, 254, 255; lecture plan of, 255; question and answer plan of, 255–58; organizing group for, 258–61.
Reclassification, need for frequent, 153, 154.
Records, and reports, as means of measurement, 271; daily, 386.
Recreation, teacher's, 343–45.
Reflex, 33.
Reports, and records, as means of measurement, 271.
Retardation, measurement of, 161–64.
Rousseau, J. J., on laws of learning, 4.
Routine, daily, 385.
Ruediger, W. C., *Agencies for the Improvement of Teachers in Service*, 323 *n.*
Russell, C., *The Improvement of City-Elementary School Teachers in Service*, 323 *n.*

St. Louis, school report of, quoted, 58 *n.*
Salt Lake City, report of survey, 339.
Santa Barbara, Cal., plan of grading, 156, 157.
Scales, use of standardized, 277–83.
School, and native equipment of children, 33–36; and health problems, 38, 39; and individual differences, 40, 41; classification in ungraded, 152, 153; program for rural, 214–16; testing of machinery of, 269, 270; growing complexity of work of, 350, 351; need of coördination in work of, 351, 352; origin and place of, 375; making effective, 375, 376; home work and credit in, 378; as a social center, 378–81. *See also* Aim of school.
School system, relation of teacher to, 381–84.
Score cards, of teaching efficiency, 320–22, 370, 371.
Search, P. W., *An Ideal School*, 159 *n.*
Sears, J. B., *Spelling Efficiency in the Schools of Oakland, California*, 143 *n.*; *The School Survey*, 207 *n.*
Self-expression, in recitation, 249.
Self-sacrifice, essential in teacher, 299, 300.
Senses, function of, 34.
Shideler, S. E., 319 *n.*
Signals, 134.
Sincerity, essential in teacher, 297.
Small, W. S., on teacher's health, 337 *n.*
Spencer, H., theory of natural punishment, 88, 89.
Springfield, Illinois, Survey of the Public Schools of, 339 *n.*
Standards, desirable schoolroom, 284, 285.
Starch, D., *Educational Psychology*, 197 *n.*, 209 *n.*; Elliott and, on reliability of grading, 273 *n.*
State, interest of in school attendance, 57, 58.
Stevens, R., *The Question as a Measure of Efficiency in Instruction*, 256 *n.*
Stevenson, R. L., 300.
Strayer, G. D., *A Brief Course in the Teaching Process*, 253 *n.*
Study, disciplinary conception of, 100; training pupil in proper habits of, 101, 102; periods, number of, 199; importance of right methods of, 220–23; intelligent, 222; symptoms of wasteful or wrong procedure, 224, 225; causes of wasteful or wrong procedure, 225–27; teacher and problem of, 227–37; aim in, 228–31; motive in, 231, 232; use of materials, 232–34; teaching how to, 233–37.
Studies, socialization of, 177, 178; form and content, 180–83; organization of, 185–87; order of, 207, 208.
Superintendent, relation of teacher to, 381, 382.
Supervision, teacher and, 348–74; defined, 348; need for, 348–50; coördination through, 351, 352; ma-

chinery of, 352–54; teacher's place in, 354, 355; problems of, 356–63; and interpretation of course of study, 358, 359; and giving instruction, 359, 360; and management of children, 360–62; methods of, 363–69; emphasis on duties rather than rights, 363; teachers' meetings, 363, 364; group conferences, 365; reading circle work, 365, 366; demonstration teaching, 366; visiting, 366, 367; individual conferences, 367; use of exhibits, 367, 368; experiment and investigation, 368, 369; and measurement of teaching efficiency, 369–71.
Supervisor, relation of teacher to, 384.
Survey, of facts concerning community and child, 179, 180.
Survey, report of, Salt Lake City, 339; Butte, 339 *n.*; Cleveland, 339 *n.*; Portland, 339 *n.*; Springfield, 339 *n.*
Sympathy, essential in teacher, 298.
System, as aid to discipline, 76, 77.

Tact, essential in teacher, 298, 299.
Tardiness, typical cases of, 58, 59.
Teacher, and control of school environment, 44–48; professional demands upon, 48; relationships of, 48, 49; as leader, 57; as leader of school public opinion, 75–80; example in promptness, 128; and curriculum revision, 187, 188; and problem of study, 227–37; problem in recitation, 244; need of accurate measures, 278–80; personality of, 293–311; positive and negative types of, 295–97; frankness and sincerity essential, 297; sympathy, 298; tact, 298, 299; self-sacrifice, 299, 300; optimism, 300, 301; good breeding, 301; personal appearance, 301, 302; conversation, 302, 303; correct English, 303, 304; voice, 304; training for personality, 304–09; training and growth of, 312–34; demand for better training of, 312–23; certification of, 313, 314; academic training demanded, 315–18; training and merit, 319; reasons for failure, 320; score card, 320–22; growth of, 323–31; necessity for growth, 323; opportunities for growth, 323, 324; reading for, 324–28; professional meetings for, 328, 329; visiting by, 329; value of self-appraisement by, 329–31; health and recreation of, 335–47; age distribution of, 335, 336; State pension systems for, 336; mortality rates of, 336, 337; nervous diseases of, 337, 338; causes of poor health, 338–41; bad light and health of, 338, 339; heating and ventilation and health of, 339; hygienic standards for, 341–43; recreation for, 343–45; need of systematic living, 343, 344; exercise for, 344; vacation for, 345; and supervision, 348–74; and curriculum, 353, 357–59; and scheme of grading, 353; and marking system, 353, 354; place of in supervision, 354, 355; relation to supervisor in interpretation of course of study, 358, 359; relation to supervisor in giving instruction, 359, 360; relation to supervisor in management of children, 360–62; and responsibilities of administration, 362, 363; position of in community, 375, 376, 380; relation of to home and community, 376–81; relation of to school system, 381–84; and superintendent, 381, 382; and principal, 382–84; and supervisor, 384; preparation for work, 385, 386; as model of housekeeping, 387, 388; professional standards of, 388, 389.
Teachers' meetings, 363, 364.
Teachers' institute, 328, 329.
Teaching, how to study, 233–37; as recitation aim, 248–50; demonstration, 366.
Temperature, proper, 341.
Terman, L. M., *The Hygiene of the School Child*, 39 *n.*, 342 *n.*; *The Measurement of Intelligence*, 145 *n.*,

150 *n.*, 152 *n.*, 280; *The Teacher's Health*, 337 *n.*
Testing, 265–89; as recitation aim, 247, 248; of membership, 267, 268; of attendance, 268; of discipline, 268; of interest, 268, 269; of school machinery, 269, 270. *See also* Measurement.
Tests, need of understanding scientific, 149–51; use of standardized, 277–83; possible abuses of, 280, 281; facts learned from, 281–83.
Textbooks, common abuses of, 253; proper use of, 254.
Theory, and practice in management, 22–24; *versus* tradition in management, 22, 23; pin-fall-quiet, 25.
Thompson, M. E., *Psychology and Pedagogy of Writing*, 197 *n.*
Thorndike, E. L., *Educational Psychology*, 143 *n.*; *The Psychology of Arithmetic*, 197 *n.*; *The Teaching Staff of Secondary Schools in the United States*, 318 *n.*
Time, available for daily program, 198.
Time allotment, problem of, 203–07; in representative cities, 204–07.
Todd, W., on teacher's health, 337 *n.*
Tradition, *versus* theory in management, 22, 23.
Training, the teacher's, 312–23; demand for better, 312–23; development of teacher, 313; demand for academic, 315, 316; demand for professional, 316–18; and merit in teaching, 319.
Truancy, 58, 60.
Ungraded room, 159.
United States Bureau of Education, 207 *n.*; *Statistics of Teachers' Colleges and Normal Schools*, 313 *n.*; *State Pension Systems for Public-School Teachers*, 336 *n.*
U. S. Public Health Service, 340 *n.*
Updegraff, H., *Recognition Given College Graduates in the Granting of Teachers' Certificates*, 314 *n.*

Vacation, teacher's, 345.
Ventilation, and teacher's health, 339.
Visiting, by teacher, 329; and supervision, 366, 367.
Voice, teacher's, 304.

Waldon School, 189.
Ward, E. G., *The Social Center*, 378 *n.*
Wellman, B., 57 *n.*
Whipple, Offner and, *Mental Fatigue*, 209 *n.*
Whitney, F. L., *The Growth of Teachers in Service*, 315 *n.*, 323 *n.*; *The Prediction of Teaching Success*, 319 *n.*
Williams, J. H., *Scale for Grading Neighborhood Conditions*, 180 *n.*
Wilson, W., use of English, 303.
Winnetka Plan, 189.
Wisconsin, State Department of Education, *Social and Civic Work in Country Communities*, 381 *n.*
Witham, E. C., 322 *n.*
Wraps, handling of, 132.
Wray, A., *Jean Mitchel's School*, 376 *n.*

3564

JUNIOR COLLEGE LIBRARY
DODGE CITY, KANSAS

Date Loaned		
Je 1 '45		
Je 8 '45		
Je 11 '45		
Je 13 '45		
Je 14 '45		
Je 15 '45		
JAN 3		
AUG 29		
APR 22 '70		

321.5
Selc

3564

JUNIOR COLLEGE LIBRARY
DODGE CITY, KANSAS.

CAREFUL USE OF BOOKS IS
GREATLY APPRECIATED.